

3

MONTHLY BULLETIN

OF

The United States Agricultural Society,

FOR 1858.

Journal of the Pennsylvania Historical and Museum Society

Volume 17, No. 1, Spring 1985



Digitized by the Internet Archive
in 2018 with funding from

This project is made possible by a grant from the Institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, FEBRUARY, 1858.

[No. I.

THE SIXTH ANNUAL MEETING of the United States Agricultural Society was held at the Smithsonian Institution, in Washington city, on the 13th, 14th, and 15th days of January last. There was a large attendance of members, with accredited delegates from State and Local Societies, representing twenty-one States, two Territories, and the District of Columbia. A detailed report of the session will appear in the volume of Transactions for 1858.

First Day. President Wilder, of Massachusetts, in his annual address, narrated the operations of the Society since the last annual meeting, comprising the Field Trial of Harvest implements at Syracuse, in July, and the Exhibition at Louisville in September. He paid a glowing tribute to the memories of two valued officers of the Society—Vice Presidents Thomas J. Rusk, of Texas, and G. W. Parke Custis, of Virginia—recently deceased, and in conclusion he positively declined a re-election.

Committees to nominate officers, to audit accounts, to report on a suggestion of the President in favor of the "Morrill Land Bill," and to decide on the propriety of holding an exhibition in 1858, were appointed.

Treasurer B. B. French, of D. C., submitted his annual report, with the statement that the financial affairs of the Louisville Exhibition were managed by the local assistant Treasurer there, and were not included. The receipts had been \$7,935 76 and the expenditures \$4,184 05—leaving a balance on hand of \$3,751 71. Of this, he estimated that about \$2,400 would be necessary to defray debts existing or incurred, and the expenses of the present meeting.

Judge H. F. French, Vice President from New Hampshire, made an impromptu report of his reception in Great Britain and Europe as a delegate from the United States Agricultural Society, and especially acknowledged the courtesies extended to him by the Imperial Agricultural Society of France, the Royal Agricultural Society of England, at Salisbury, the Suffolk County Agricultural Society, and the Irish Royal Agricultural Society, at Waterford. He then gave an account of the most novel and important labor-saving implements that he saw abroad—the steam-plough. The practicability of ploughing by steam-power he considered as established, the only question in England being now as to whether the locomotive or the stationary engine is the better. Judging from what he had seen there, and from what he knew of the inventive genius of his countrymen, he believed that the day would come, and was not far distant, when steam-ploughs would be as much used on our western prairie lands as are now reaping and mowing machines.

Hon. B. P. Johnson, Secretary of the New York Agricultural Society, agreed with Mr. French in the opinion that the plough must give way to the digging-machine and the horse to the locomotive. If Boydell & Fowler, in Great Britain, can contract to take farms to plough with their steam machine, at a less price than it can be done by horse-ploughs, there can be no question about the future success of steam-ploughing in the United States. We may beat England on her own soil at ploughing, as we have at reaping; and he took advantage of the opportunity to applaud most warmly the honorable character of the British people, who, (no matter what their preconceived prejudices or notions,) would always recognise the verdict of a fair trial. In this connexion, he gave some interesting reminiscences of his official connexion with the "Exhibition of all Nations" in 1851, when he introduced an American plough. It was at first condemned, but after a triumphant test in the field its merits were recognised, and its form is adopted, almost exactly, by the manufacturers of the now eulogised "English Poney Plough."

President Wilder submitted some remarks of the celebrated Lindley in the Gardener's Chronicle, to the effect that heavy soils could be steam-ploughed at a cost of \$1 87 per acre, and lighter soils at \$1 38, at depths respectively of 5½ and 7 inches; a depth of 12½ inches would cost \$2 75 per acre. This work is done much better than by a common ploughing, and equal to a good digging by hand.

Gov. Brown, Vice President from Massachusetts, thought the day would come when half the farm implements now in use would be dispensed with, and spoke in terms of reprobation of the efforts of many persons even now against improvement. With respect to steam-

ploughs and the like, he warned persons against spending too much money on machines operating by horizontal motion. Rotary motion is preferable, and will ultimately prevail. He had no doubt whatever that steam-ploughs would be entirely successful.

Messrs. John Jones, of Delaware, Byington, of Iowa, and Brooks, of Massachusetts, also participated in the discussion on ploughing by steam. Mr. Peirce, of D. C., exhibited a model of a new steam-plough invented by J. P. Klengle.

Senator Harlan, of Iowa, after prefatory remarks, offered the following resolution, which was carried:

Resolved, That the President of this Society for the coming year be requested to consult with the members of the Committee on Agriculture of the House of Representatives, and with the members of the Committee on the Patent Office of the Senate, with the view of perfecting a proper plan of co-operation by Congress in aiding this Society in carrying out the objects of its organization.

Dr. Antisell, of D. C., was introduced, and addressed the Society at length on "The necessity of having a more perfect knowledge of the mineral necessities of our own crops developed." He brought under the notice of the Society some observations regarding the proper application of chemistry to agriculture, remarking that the last fifteen or eighteen years had opened to us varying views of the value of chemical science. The old view of the rotation of crops, which believed it to be necessitated by some vegetable poisons poured out by the roots, has been completely overturned by our better knowledge of soils. Then arose the idea of the analyses of soil to indicate whether the necessary elements were present or not, and the analyses of soils became the prime necessity of the day. Dr. A. observed that since 1840 he had been engaged in such analysis, and had made nearly two thousand separate analyses; at the commencement, having implicit faith in the results—a faith which in a few years became sober caution, and has ended in positive distrust. The analysis of a soil gives no real valuable result either of scientific or practical value. The earlier analysis only indicates a soil to contain a few ingredients, while we now know that the important matters are always in minute proportions—so much so as to elude the earlier and coarser analyses. Chemical methods and apparatus are now so much advanced that we can readily detect those matters which formerly eluded notice. Looking back at the imperfect processes practised, we may safely say that almost all analyses made previous to 1847 are worthless; but even the best made analyses of a soil affords no useful indications to the farmer. What is required is a more perfect knowledge of the mineral matters of crops. Of the constitution of the saline matters of plants we are much in the dark; even of wheat the per centage varies in different analyses from $1\frac{1}{4}$ per cent. to $4\frac{1}{2}$, and the mineral matters of straw vary from $3\frac{1}{2}$ to $16\frac{1}{2}$ per cent. In this variety of conclusion where is the truth? Yet all the results may be right, allowing for variations of climate, soil, manure, and age of the plant; but even this variation should be known, and we ought to be able to formulise our plants as we do minerals. Every species of plant has an appropriate ash and a certain amount of it, which might be made to be included under a general formula appropriate to the species. It is well known that certain saline matters in plants favor the production of gluten, and others favor sugar, starch, and such principles. Now, we require to know what are the salts which increase the one and what the other. Plants cultivated for food are not placed in natural circumstances, they are forced; and they require additional and various food to develop the large amount of proximate principles which we draw from them. We can increase the quantity of sugar in the beet by vegetable manure and lime, and we can increase the amount of gluten by soluble phosphates; but we require additional experiments to complete this chain of knowledge, so important to the farmer. These experiments should be undertaken under the sanction of the United States Agricultural Society, and he now placed this subject before their notice that, if it meets their approval, they may recommend that such experiments be made; suggesting that a portion of the grant made by Congress for the benefit of agriculture might be appropriated for that purpose.

Mr. Calvert, of Maryland, spoke warmly in approval of Dr. Antisell's paper, exposing as it does the worthlessness of much that had cost farmers a great deal of money in the shape of analyses of soil, patent manures, &c. He also spoke of the paramount claims that agriculture, the first interest in the country, has on the Government, and concluded by offering the following resolution, which was passed, viz:

Resolved. That a committee be appointed to memorialize Congress for a specific appropriation to carry out the investigations proposed by Dr. Antisell.

Hon. B. P. Johnson presented a communication from Governor King, of New York, declining a re-election as a member of the Executive Committee, or to any other office in the Society, because his public duties occupy his entire time and attention. President Wilder availed himself of the occasion to acknowledge the valuable co-operation of Governor King, who had, since the organization of the Society, been earnest in his labors for its welfare.

President Wilder made a formal announcement of the awards at the Syracuse trial of harvest implements; and other business was transacted.

Dr. Loring, of Massachusetts, rose and addressed the meeting in finely couched and feel-

ing terms in reference to the loss of its two distinguished Vice Presidents, Rusk, of Texas, and Custis, of Virginia; after which he offered the following resolutions:

Resolved, That the United States Agricultural Society lament the loss of the Hon. THOMAS J. RUSK, of Texas, by whose decease the cause of agriculture has been deprived of a firm friend, and the nation of a patriotic and enlightened statesman; and that, while we sympathize with his friends and his State in their bereavement, we would remind them of the monument he erected to his memory during life, and of the legacy he bequeathed to them in the multitude of his virtues.

Resolved, That, as American farmers, we cherish the memory of GEORGE WASHINGTON PARKE CUSTIS, of Virginia, as an ornament to our Society, and as the bond which connects us personally and intimately with the illustrious founder of our Government, and with the wisest and most distinguished of the cultivators of the soil.

Resolved, That copies of these resolutions be forwarded to the families of the deceased, and that as a last mark of respect to their memories, this Society now adjourn.

The resolutions were unanimously adopted, and the Society adjourned until the next morning. The nominating committee, of one from each State and Territory represented, met in the evening, and, after a protracted session—agreed upon a list of officers.

Second Day. President Wilder read a letter from Joshua Vansant, Esq., President of the Maryland Institute, inviting the next fair of the association to be held in Baltimore in October next. Referred to the Executive Committee.

A letter was read from Joseph S. Lovering, Esq., of Oakhill, Philadelphia county, Pa., who forwarded, for the examination of the Society, five different samples of sugar made from the *sorghum saccharatum*, with an account of seven experiments made by him with the view of determining its value as a sugar-producing plant. These experiments, made with cane planted expressly, are thus condensed in Mr. Lovering's pamphlet:

"The first experiment was a discouraging one, and the dark viscid mass stood six days without the sign of a crystal; but being kept warm four days longer yielded a crop of soft crystals. The second produced a yellow-brown sugar, as dry as and about the color of second-quality Cuba sugar used by refiners. For the acre 625½ lbs. sugar, and 123¾ gallons molasses, produced from 18,148 canes, yielded 1,737 gallons juice, weighing 9 lbs. per gallon, or 15,633 lbs., being 4 per cent. of sugar and 9.50 per cent. of molasses, or 13.50 per cent. together. The third experiment was a failure. The fourth was very successful, producing 1,221.85 lbs. to the acre and 74.89 gallons of molasses. The fifth produced white sugar directly from the cane without refining. The seventh experiment was in refining, and 15 lbs. of good loaf sugar were produced from the proceeds of the experiment considered failures. The conclusion that Mr. L. comes to is, that an acre will probably yield 1,466.22 lbs. of sugar and 74.89 gallons molasses from 1,847 gallons of juice. The weather was unpropitious to the ripening of the cane, and probably ten per cent. was lost in consequence, which would increase the quantity to 1,612 lbs. of sugar and 81 8-10 gallons of molasses, a yield very nearly corresponding to the best conducted Louisiana plantations. The best time for sugar-making is when the seeds are all ripe, and after several frosts, the thermometer below 30 degrees; frost or hard freezing does not hurt the juice nor the sugar, but warm weather after frost does. Cane cut and housed, or shocked in the field, will probably keep unchanged a long while. When the juice is obtained, the process of sugar-making should proceed continuously without delay. The clarification should be as perfect as possible—bullock's blood and milk of lime will answer for clarification, skimming being required constantly. The concentration and boiling done after clarification should be as rapid as possible in shallow evaporation. With these conditions secured, it is about as easy (Mr. L. says) to make good sugar from the Chinese sugar cane as to make a pot of good mush, and much easier than to make a kettle of good apple-butter."

Mr. Olcott, of New York, said that these experiments, coming as they did from an intelligent gentleman extensively engaged in the sugar-refining business, could but make a strong impression on the minds of all interested in the culture of the new plant. The value of the sorgho-plant depended greatly upon the amount of sugar which could be produced from it. These reliable experiments, coming from a gentleman of experience, enable us to put aside all theories and speculations and calculate on facts. We have not only the results, but the whole strain of work by which they were arrived at; and he should therefore move that the large silver medal of the Society be awarded to Joseph S. Lovering, of Philadelphia.

Senator Harlan thought the matter should not be pressed to too hasty a conclusion, and moved the reference of the matter to a committee, who should examine the samples and the process detailed by Mr. Lovering, and report whether, in their opinion, such bestowal of the medal should be made. The Chair appointed as such committee ex-Lieutenant Governor Brown, of Massachusetts, D. J. Browne, of D. C., and H. S. Olcott, of New York.

Hon. B. P. Johnson, from the committee to whom was referred the land bill, presented in the House of Representatives by the Hon. J. S. Morrill, of Vermont, reported the following preamble and resolutions, which were unanimously passed:

Whereas it has been the established and recognised policy of the General Government to set apart a portion of the public domain to the purposes of education; and believing that nothing will so well promote the material prosperity of the country and enhance the value of our whole public domain as to increase scientific knowledge, stimulate and properly direct the energies and dignify the profession of agriculture, by the establishment of a system of State agricultural colleges throughout the United States, to be adequately endowed, so as to secure the services of the highest order of professors to render them stable, independent, and successful: Therefore.

Resolved, That the Senate and the House of Representatives of the United States be earnestly requested to grant, during the present session of Congress, to the several States, Territories, and District of Columbia an adequate quantity of the public lands to endow and maintain agricultural colleges in each State, Territory, and the District of Columbia; and we recommend for this purpose the main features of the House bill referred on December 14, 1857, to the Committee on Public Lands, as wisely designed to carry out the objects the Society has in view.

Resolved, That the organization of such institutions is no longer an experiment, but they are justly regarded by the civilized world and by the best cultivated agricultural countries of Europe, not only as objects of public necessity, but of paramount public utility, deserving the material aid and care of Government.

Resolved, That the Secretary be directed to furnish each member of the Senate and House of Representatives with a copy of the above resolutions.

Hon. D. J. Browne, of the Agricultural Bureau of the Patent Office, made the following report from the committee appointed "to investigate and experiment on the sorgho-sucré, or Chinese sugar-cane, with the view of determining its value for the purposes of syrup and sugar-making, soiling cattle, the use of seed for feeding stock, for bread-making, and for the manufacture of paper and alcoholic liquors :"

Agreeably to the requirements of the second resolution, (page 61 Journal of the Society for 1857,) there was imported from France sufficient Sorgho seed to plant one hundred acres of land. This seed was placed in the hands of a requisite number of individuals in different sections of the country, who cultivated it under various conditions of soil, climate, etc. From the results of their experiments in ninety localities, between New Brunswick in the British dominions and Mexico on the one hand, and between Florida and Washington Territory on the other, though contradictory or conflicting with each other in some instances, the committee arrived at the following conclusions :

1. The soil and geographical range of the Chinese sugar-cane correspond nearly with those of Indian corn, and it thrives with great luxuriance in rich bottom lands, or in moist loamy soils, well manured. It will also produce a fair crop on dry, sandy, or gravelly soils too poor to give a remunerative crop of other plants. On the latter class of soils, however, it proved more profitable to the cultivator where there had been applied a moderate quantity of bone-dust, wood ashes, poudrette, phosphated guano, gypsum, or super-phosphate of lime.

2. This plant endures cold much better than corn, and resists without injury the ordinary autumnal frosts. It will also withstand excessive drought. In favorable seasons, when planted early in May, it will ripen its seeds in September if the soil be dry and warm, in many parts of the extreme northern and New England States, and in October in the middle and southern States, when planted as late as the 20th of June. At the extreme South it may be planted successively from January into July.

3. The cost and culture of this plant does not differ essentially from that of Indian corn. The seeds require to be planted at different distances apart, according to the strength of the soil. On light, moderately-rich land it succeeded best when sown in rows or drills three feet apart, with the plants a foot asunder along the drills, or in hills with a corresponding number of stalks to each; but on richer land it has been found preferable to plant the hills four or five feet asunder. If cultivated exclusively for soiling or dry fodder, the seed may be sown broadcast or in drills, and treated in the same manner as Indian corn when grown for that use.

4. The height of the plant when fully grown varies from six to eighteen feet, according to the locality and the condition of the soil; the stalks ranging from half an inch to two inches in diameter. The weight of the entire crop to an acre, when green, varies from ten to forty tons. The amount of seed to the acre is reported to range from fifteen to sixty bushels.

5. During the earlier stages of the growth of this plant, say for the first six or eight weeks, it makes but little progress except in penetrating the ground with its roots, which occasioned so great disappointment in some cultivators that they exterminated it from their fields, and replanted for other crops. From the natural tendency of the genus to which it belongs to sport or run into varieties, many persons have come to wrong conclusions with a belief that the seed was impure or mixed. The period of growth varied from ninety to one hundred and twenty days; the seeds often ripening unequally in the same field.

6. The yield of juice in weight of well-trimmed stalks was about fifty per cent. The number of gallons of juice required to make a gallon of syrup varied from five to ten, according to the locality, the nature of the soil on which it was produced, and the succulent condition or maturity of the canes. In the province of New Brunswick it required ten to one; in the rich bottom lands of Indiana and Illinois about seven to one; and in light lands in Maryland and Virginia five gallons to one of syrup. The yield of syrup per acre varied from one hundred and fifty to four hundred gallons. The amount of pure alcohol produced by the juice ranged from five to nine per cent. In cases where the plant was well matured and grew upon a warm, light soil, the juice yielded from thirteen to sixteen per cent. of dry saccharine matter; from nine to eleven per cent. of which was well-defined, crystallized cane sugar, and the remainder, uncrystallizable matter or glucose; but that taken from stalks obtained on rich low lands, luxuriant in their growth, yielded considerably less.

7. A palatable bread was made from the flour ground from the seeds of this plant, of a pinkish color, caused by the remnants of the pelicles or hulls.

8. By accounts from all parts of the country, this plant is universally admitted to be a wholesome, nutritious, and economical food for animals; all parts of it being greedily devoured, in a green or dried state, by horses, cattle, sheep, and swine without injurious effects; the latter fattening upon it equally as well as upon corn.

9. Paper of various qualities has been manufactured from the fibrous parts of the stalk, some of which appear to be peculiarly fitted for special use.

From the above summary the committee are of opinion that the Sorgho sucres possesses qualities which commend it to the especial attention of the agriculturists of all parts of the country, as the preceding facts have demonstrated that it is well suited to our national economy, and supplies what has been long a great desideratum.

A long and interesting debate ensued, in which a great variety of opinions were advanced by gentlemen from different sections of the country. Mr. H. K. Burgwyn, Vice President from North Carolina, who had planted twenty-five acres of it as a forage crop, was of the opinion that it was profitable. Dr. Loring, of Massachusetts, and Mr. Johnson, of New York, severally reported cases which had fallen under their observation, which seemed to show that the cane was not a profitable forage crop in their States. Mr. Pratt, of Tennessee, was of a decidedly contrary opinion, for he had planted it for this very purpose, and had met with many planters who had fed it with great success. Mr. Chas. L. Flint, Secretary of the Massachusetts State Board of Agriculture, stated that the cows at the State Farm would not eat it or touch it; and he agreed with Dr. Loring in his general opinion of it. Senator Harlan said that in his district of country (Iowa) the cattle and animals of all kinds eat the sorgho stalks with great avidity, and he thought that perhaps the Massachusetts cattle refused it because of being unripe and bitter. Mr. Brooks, of Massachusetts, had experimented somewhat, and he was willing to give it another trial. He thought that both sides of the controversy had some truth with them.

Dr. Loring moved that the report be re-committed. Mr. Byington, of Iowa, refused to listen to any such attempt to smother so important a document. It had been prepared with singular ability, and embodied facts of the greatest value. He saw no reason why the plant should not be welcomed, if it was suited only to one single section of country. The inter-

ests of the extreme South even were as much under the care of the Society as those of the North; and because Dr. Loring could not make his cattle eat sorgho in Massachusetts, it was no reason for refusing to believe that there were more sensible cattle elsewhere. He had tried his horses on one occasion with chopped sorgho stalks and oats, and they had rejected the latter until the sorgho was entirely consumed. The Hon. Frederick Smyth, Vice President from New Hampshire, had made excellent sirup at home, and had seen it made in Kansas at half the cost of ordinary molasses. Senator Harlan said that in Iowa alone 100,000 acres would be planted, if this Society would give the journals of that State reason to believe that the plant was worthy their attention and endorsement; and he did not doubt but that through the reports which would go forth from the gentlemen of the press who were here present, a great influence would be exerted in favor of the plant.

Mr. Olcott said that any gentleman who would question the value of the Sorgho was but very poorly acquainted with certain positive results, such as those presented by Mr. Lovering. After the sugar question has been disposed of, we still have the sirup, but especially the alcohol which can be made from its juice. Mr. O. believed that in our seaboard States this manufacture would be the one most pursued. Alcohol could be made from sorgho juice cheaper than from grain, and its employment for this purpose would increase the quantity of disposable breadstuffs. He exhibited samples of wrapping paper and pasteboard made from sorgho fibre by Mr. Hyde, of Massachusetts, who says that in his State this will be the most profitable manufacture.

The vote on Dr. Loring's motion to recommit was a tie, and the President decided it in the negative. On motion of Mr. Byington the Society accepted the report, an amendment to "accept and adopt" it having been lost by two votes.

Gov. Brown, from the special committee on Sugars, offered the following report, which was amended by the addition of the last clause, and adopted unanimously:

The committee appointed to consider the propriety of awarding the large silver medal of the Society to Mr. Joseph S. Lovering, of Philadelphia, respectfully report, that having examined the specimens of sugar presented by him, and the scientific examinations set forth in his published pamphlet, they recommend that the medal be awarded to Mr. Lovering for the care with which his experiments have been made and the samples presented. but your committee do not wish to be understood as certifying that the manufacture of sugar from the plant, in the northern States, is as yet demonstrated to be more profitable than other crops.

Mr. Olcott brought to the notice of the Society Mr. Leonard Wray, from Caffraria, the introducer of the imphee, after which Mr. D. J. Browne offered a resolution recommending a comparative test of the two articles, sorghum and imphee, to the terms of which resolution Mr. Wray was about to offer opposition, when the subject was laid over and made the special order for consideration the next morning.

Hon. B. V. French, of Massachusetts, from the Committee on Nominations, reported their opinion that the whole subject as to holding a fair of the Society this year be referred to the Executive Committee to be now chosen. A list of candidates was also reported.

Some changes were proposed in the composition of the Executive Committee, and as Col. Kimmell felt it necessary to resign, as Vice President from Maryland, in consequence of a pressure of official duties, Odin Bowie, Esq., was put on the list in his place. The report of the Nominating Committee was accepted, and the Society, by ballot, elected the following

OFFICERS FOR 1858.

President.—Gen. TENCH TILGHMAN, of Maryland.

Vice Presidents.—J. D. Lang, of Maine, H. F. French, of New Hampshire, Fred. Holbrook, of Vermont, John Brooks, of Massachusetts, B. B. Thurston, of Rhode Island, S. H. Huntington, of Connecticut, B. P. Johnston, of New York, W. P. Robeson, of New Jersey, David Landreth, of Pennsylvania, John Jones, of Delaware, Odin Bowie, of Maryland, Philip St. George Cocke, of Virginia, H. K. Burgwyn, of North Carolina, F. W. Alston, of South Carolina, Richard Peters, of Georgia, C. C. Clay, jr., of Alabama, M. W. Phillips, of Mississippi, J. D. B. DeBow, of Louisiana, Lucien Buttles, of Ohio, W. L. Underwood, of Kentucky, T. Fanning, of Tennessee, D. P. Holloway, of Indiana, B. F. Edgerton, of Wisconsin, H. C. Johns, of Illinois, T. R. Barrett, of Missouri, Michael Shoemaker, of Michigan, D. L. Yulee, of Florida, Guy Bryant, of Texas, LeGrand Byington, of Iowa, A. P. Bradford, of California, W. W. Corcoran, of the District of Columbia, Manuel H. Otero, of New Mexico, H. M. Rice, of Minnesota, J. H. Lane, of Oregon, D. Anderson, of Washington Territory, John M. Bernhisel, of Utah, B. B. Chapman, of Nebraska, F. M. Arney, of Kansas.

Executive Committee.—Henry Wager, of New York, J. McGowan, of Pennsylvania, Josiah Ware, of Virginia, F. Smyth, of New Hampshire, Henry Wilson, of Ohio, John Merryman, of Maryland, James W. Brown, of Illinois.

Treasurer.—B. B. French, of the District of Columbia, }
Secretary.—Ben. Perley Poore, of Massachusetts, } Offices at Washington, D. C.

Hon. Henry Wager, Vice President from New York, offered the following resolutions, which were seconded by Mr. Tayloe, of the District of Columbia, and unanimously adopted, Vice President Kimmell taking the chair.

Whereas the Hon. MARSHALL P. WILDER, of Massachusetts, who has for years so eminently distinguished himself by his exertions in promoting the cause of terra-culture, has declined a further re-election to the office of President of this Society, which he has filled since its creation with ability, industry, and outlay of his private means: Therefore,

Resolved, That his name be placed on the roll of honorary members of the United States Agricultural Society; and that the Executive Committee are instructed to present him with a suitable testimonial as a mark of the

appreciation of this Society for the energy, time, and money which he has expended in advancing its interests, and raising it to the position which it now occupies.

Resolved. That while the members of this Society regret exceedingly that personal considerations constrained him to decline a re-election, they would express their kind regards and most earnest desires for his future happiness.

President Wilder replied with his usual felicity, assuring the Society that he should ever feel a deep interest in its future prosperity. "Long," said he, "may it live to be on honor and blessing to our country, and may its last days be its best days." He then appointed Messrs. Calvert, of Maryland, and Byington, of Iowa, to conduct the newly President elect to the chair, which he vacated.

General Tilghman, on taking the chair, delivered an able inaugural address, marking out a course of action for the Society, and soliciting their constant and hearty co-operation.

Col. Kimmel read two letters written by the late Vice President Custis, expressing his desire to be present at the Louisville exhibition. On motion, they were received and ordered to be placed in the archives of the Society.

Mr. George Wood, of New York, offered a letter addressed to the Society by the American Guano Company, respecting their guano taken from Baker's or New Nantucket island and Jarvis island, in the Pacific ocean, accompanied by two samples of the guano.

Resolutions were offered expressive of the interest the Society feels in the cheap supply of guano and the breaking down of all monopoly in the article, and of their consequent good wishes for the success of the American Guano Company as aforesaid. They were opposed, and the whole subject was laid on the table. During a debate on them, Mr. John Jones, Vice President from Delaware, gave his experience as very unfavorable to guano. He considered it unprofitable to any one who relied upon it to raise crops. Mr. Johnson, of New York, agreed with Mr. Jones as to the effect of guano on soils. It is undoubtedly a stimulant, but not to be trusted as a fertilizer; like alcohol in the human system, it imparts temporary power, but is apt to leave that to which it is applied in a more prostrate condition than it found it.

Third Day. President Tilghman read an invitation from Professor Bache to visit the rooms of the United States Coast Survey, for which a vote of thanks was passed.

Mr. Wager read the following resolution, which he stated had been unanimously passed by the Executive Committee the evening previous :

Resolved. That, in obedience to instructions from the Society, the Executive Committee request the Hon. Henry Wager to inform the Hon. Marshall P. Wilder that the sum of \$250 is placed at his disposition for the purchase of such a testimonial as may be to him most acceptable.

Col. Burgwyn, Vice President from North Carolina, moved that the Society endorse the action of the Executive Committee, and commented in warm terms on the united energy, intelligence, liberality, and public spirit which had marked the official connexion of Mr. Wilder with the Society.

President Tilghman united in testifying to the eminent services rendered by his predecessor in the chair; after which the resolution of the Executive Committee was endorsed unanimously and by acclamation.

Ex-President Wilder replied to the vote thus taken, and feelingly returned his acknowledgements for the very kind treatment he had received at the hands of his fellow-members. He wished to take the opportunity to give testimony to the zealous co-operation he had experienced from members and officers of the Society who had with him borne the burden and heat of the day. As to the testimonial the Society had been so kind as to vote himself, he felt some reluctance in accepting it, considering the not overflowing condition of the treasury. Still, as it would continue a grateful memorial to his family and children when he himself slept beneath the sod, he would very gratefully receive it.

Mr. Leonard Wray, by invitation, described the *imphee* of Caffraria, eighteen distinct varieties of which he had introduced into Australia, New Zealand, France, and Algeria, and on the American continent from Canada southward to the Brazils. The chief value of this plant, as compared with the ordinary sugar-cane, is that some of its varieties pass through all their stages of growth and maturity in three months, whereas the ordinary sugar-cane requires from eighteen to twenty-three months. How does it compare with the sugar-cane in another respect, namely, the proportion of saccharine matter? From the *imphee* as high as seventy and sometimes seventy-five per cent. of juice had been obtained. Nothing like this can be done with the West India sugar-cane. He had heard that in Louisiana as high as seventy per cent. had been obtained. That may be true, but he must be forgiven for doubting it. Certain he is that the relative proportion of juice is much the greatest in the *imphee*. And next as to quality. The *imphee* contains eighteen to twenty per cent. of salts, as shown by the saccharometer, which registers the same whatever be the nature of the salts concerned, whether salts of lime, potash, or sugar. If *imphee* be grown on rich swamp or bottom lands it will show a great amount of salts; but when boiled down nothing beyond the average of crystallizable sugar is obtained. Indeed, sometimes it is found that

the syrup from imphee grown in such rich lands cannot be made into sugar at all from its incapacity to crystallize. Such soils produce syrup for distillation and molasses in great quantity and of the very best description; but they are not productive in crystallized sugar. The imphee was grown this year in Canada, at Brantford. Both imphee and sorgho were raised there, but neither ripened its seed, though the imphee attained a height during growth of nine or ten feet. The place where it grew was unfavorable, being along the lower, and consequently wet and cold, bank of the Grand river, where fog prevailed the greater part of every morning. The year before last the sorghum planted at Brantford, though twice eaten down by cattle, grew up again and attained, before the frosts came, a height of ten feet. Next season will probably determine the question as to the ability of sorghum and imphee to succeed in Canada and New England. What he had said thus far regarded the imphee as a sugar and syrup plant merely, but considered as an ancohol plant its capacity to produce is wonderful. The Chinese sugar-cane had produced thirty gallons of alcohol to every ton, and from ten to fifteen. and at the highest twenty tons per acre, at the cost of two dollars and a half a ton. Now, the beet root had been known to yield 495 gallons per acre of spirit at forty-five over-proof, and the imphee would overrun that in almost every case, and give six hundred gallons to the acre. This has been done in France, and American farmers can beat it.

Dr. Charles T. Jackson, of Massachusetts, made some very interesting remarks, based on recent investigations which he had made by order of the Patent Office to investigate the amounts of saccharine matter in different varieties of sorgho and of imphee, both of which he had found would produce crystallized and crystallizable sugar. Seed and sugar cannot both be raised in great amounts in the same plant. If one be great the other must be small; one will preponderate at the expense of the other. We cannot have a great crop of seed and of sugar at the same time. The unripe cane yields grape sugar or glucose, whilst the ripe cane gives crystallizable or cane sugar. It is always possible in Massachusetts to make syrup, but not cane sugar. But this syrup or glucose is better than cane sugar for alcohol. (in now so greatly increased request for manufacturing, chemical, and medicinal purposes,) because cane sugar has to be restored to grape sugar syrup before it can yield alcohol. The average crop of syrup from the sorgho in Massachusetts is 300 gallons to the acre. Mr. Hyde, of Newton Centre, had so produced it, and sold it at a dollar a gallon, whilst ordinary molasses only brought fifty cents. This is a fair test of its value in the market. Its value to the rich is great, but to the poor still greater. From it can be made their burning fluids. In reply to a question from a member, Dr. Jackson said that on average good soils he considered three hogsheads of syrup per acre could be safely reckoned on. These plants would certainly hybridize, as they all belong to the genus *andropogon*.

Dr. Jackson next mentioned some minute results of his investigations as to the best method of forming crystallized sugar from the syrup of the sorgho. It is better, he said, to have an excess of lime. He also insisted on the necessity of a cold filtration before boiling, to rid the syrup of all impurities. After a first boiling he advised a second boiling, to be followed by a second skimming and filtration. The boiling must be done slowly, and care taken not to burn the syrup, or it will not crystallize into sugar. He also enlarged on the advantages of making sugar *in vacuo*, which enables the whole mass of syrup to crystallize.

Mr. Wray coincided with Dr. Jackson. Feculent matter of all kinds was exceedingly prejudicial to crystallization. He had himself patented in most European countries and also here in the United States a method of cold defecation, which purifies the syrup before the application of heat.

Mr. Clemson, of Maryland, asked if the imphee exhibited any difference in growth or product when raised on calcareous and silicious soils.

Mr. Wray said that calcareous soils were every way far superior to the silicious, and instanced several circumstances in proof. He took the opportunity to remark, also, that in selecting seed for sowing for a crop care should be had to take that not ripe, but just previous thereto. Experience among the Kaffirs had taught them that, and they always made a point of using unripe seed for sewing purposes.

Mr. Olcott, after expressed his confidence in the success of the imphee, and in the judgment of Mr. Wray, offered resolutions, which, after having been amended, were passed:

Resolved, That in the opinion of this Society, judging from the facts presented and the evidence adduced by Mr. Leonard Wray, the imphee has attracted the attention of some of the most illustrious agriculturists of Europe and this country.

Resolved, That the Commissioner of Patents be respectfully requested to test, through his correspondence or otherwise, at the earliest practical period, the capacities of the imphee as compared with the sorgho; and that the individual members of this Society use their private exertions to test their comparative merits, and report the results to the Patent Office.

Dr. Higgins, State chemist of Maryland, made a report from a committee appointed in 1857, to investigate the disease popularly called "hog-cholera." It was properly, he said, a *Pneumonia*, the seat of lesion being in and around the lungs and not the bowels. The remedies are like those in a case of epidemic, such, for instance, as that at Norfolk. He

therefore used as preventives gas tar, quick and water-slacked lime. The cause of the disease lies in an excess of fibrin in the animal's blood, which makes it too thick, and consequently unable to pass with the requisite facility through the arteries of the lungs. Hence the necessity of an alkaline carbonate is indicated, and he had found a mixture of equal quantities of carbonate of soda and barilla to be a perfect curative. His rule was to give ten grains of the mixture in swill three times a day to each hog, and it had been in all cases successful, when the case had not too far gone. Dr. H. incidently remarked, in answer to a question put by a member, that the value of the hogs which died last year by this disease amounted to several millions of dollars. He had seen them die in as large a number as five hundred a day.

On motion of Mr. Byington, the report was accepted and adopted, and a copy *in extenso* was requested for publication.

On motion of Mr. Burgwyn, seconded by Mr. Wilson, of Ohio, the thanks of the Society were voted to its officers; also to the Regents of the Smithsonian Institution for the use of the hall, and to the gentlemen of the press who had so ably reported the proceedings.

President Tilghman then delivered the valedictory:

Gentlemen of the United States Agricultural Society:

On behalf of the officers of the Society permit me to thank you for the complimentary resolutions which have just been passed.

The time has now arrived when we must once more say farewell; and the agreeable intercourse which we have enjoyed must be suspended until our next annual *reunion*.

Let me entreat you, gentlemen, to remember, when you reach your far-distant homes, that your duties, as members of the Society, are not to be confined to an attendance on its fairs or a participation in the business of its annual meetings. The degree of vitality possessed by every organized body depends upon the constant and healthful action of all the parts of which it is composed.

The Executive Committee have made arrangements for opening an office at Washington for collecting a library, and for the publication of a Monthly Bulletin, which will be forwarded to all members free of charge.

The assistance of every member is required in the collection of books, seeds, models, minerals, specimens of natural history, and all other objects of interest and value to the farmer. It is also important that the Secretary, as editor of the Bulletin, should be furnished with communications on subjects relating to agriculture, and be constantly apprized of everything new and important connected with the great farming interest of the nation. Let it be your constant endeavor to disseminate among your neighbors full and correct information in regard to the nature, the object, and the importance of our association; to induce as many as possible to enroll themselves among its members, and to obtain donations to its treasury.

And now, gentlemen, permit me to wish you a pleasant return to the enjoyment of your domestic pursuits, and to invoke on your labors the richest blessings of a merciful and bountiful Creator.

I bid you, brother farmers, a respectful and affectionate adieu.

SALUTATORY.—President Tilghman, in his inaugural address, gave a sketch of the position of the United States Agricultural Society, and then went on to say:

"Surely, then, we have an institution of the highest interest and one that is deserving of our greatest care. Already has it acquired an honorable *'name,'* but its *'local habitation'* is not yet sufficiently provided for. It is time that it should be placed on a footing of still greater permanence; that it should be known as one of the established institutions at the capital of the nation; and I hope that the present meeting will not be suffered to terminate until arrangements have been made for opening a permanent and suitable office at Washington, (under the immediate charge of our able Secretary) by which a connexion may be established with the numerous agricultural societies throughout the country and also with those of Europe; from which shall emanate a monthly journal of proceedings and other valuable information to greet you at your firesides and cheer you in your labors;—with an annual volume of transactions, which shall be regarded as the highest authority upon agriculture;—and where all those connected with agriculture who may visit this city may meet as brothers at a common home, and find a collection of objects in which they have a common interest."

These valuable suggestions were promptly considered by the new Executive Committee, and have been carried out. The office of the Secretary has been permanently established at No. 365 Pennsylvania avenue, up stairs, and will be open from nine o'clock, a. m., until noon. Donations of books for the library, of minerals for the cabinet, of models of agricultural implements, and of agricultural periodicals and newspapers, are respectfully solicited, and will be acknowledged. The services of the Secretary are placed at the disposal of all agricultural organizations in the United States, who may wish information or assistance at the seat of Government.

This initial number of the *Monthly Bulletin* has been issued in haste, and is entirely occupied with a necessarily condensed report of the proceedings at the recent annual session of the Society. Future numbers will contain a general statement of the position of agricultural affairs at this metropolis, (including such information as will be furnished by the Agricultural Bureau and by the Examiner of Implements in the Patent Office,) with reports of the operations of State Boards and Societies, Agricultural Colleges, and of all Legislative recognition of the predominant interest of the country. To what extent, however, the *Bulletin* will justify the expectations of its projectors will be best understood by its future history, and by this it must be judged. The Secretary of the Society, charged with its editorship, can only promise his best efforts, with such assistance as he may be able to obtain, to make it a valuable *compilation of geponic facts*, interesting to the agriculturalists of the United States, and an acceptable visitor at every rural home.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

Vol. I.]

WASHINGTON, MARCH, 1858.

[No. II.

CONSTITUTION OF THE UNITED STATES AGRICULTURAL SOCIETY.—The undersigned, in order to improve the Agriculture of the country, by attracting the attention, eliciting the views, and combining the efforts of that great class composing the Agricultural community, and to secure the advantages of a better organization, and more extended usefulness among all State, County, and other Agricultural Societies, do hereby form ourselves into a Society, and for its government adopt the following Constitution :

Sect. I. The name of this Society shall be the United States Agricultural Society.

Sect. II. The Society shall consist of all such persons as shall signify to any officer of the Society a wish to become a member, and who shall pay two dollars to the Treasurer of the Society, and a like sum annually thereafter; and of delegates from the State Agricultural Societies, in the States and Territories, and District of Columbia, who may be appointed to attend the annual and other meetings of the Society, and who shall pay the like sum, and also of such honorary members as the Executive Committee may see fit to elect. Each member shall be entitled to receive a journal, or publication of this Society, containing an account of its proceedings, and such additional matter as shall be deemed worthy of publication, free from any expense except postage. Ten dollars shall entitle one to the privilege of Life-membership, and exempt him from any annual taxation.

Sect. III. The officers of this Society shall be a President, a Vice President from each State and Territory in the Union, and from the District of Columbia; a Treasurer and a Secretary, an Executive Committee, consisting of seven members; the President of the Society and the Secretary shall be *ex-officio* members; and the President shall be Chairman of the Executive Committee.

Sect. IV. The President shall have a general superintendence of all the affairs of the Society. In case of his death or inability to discharge the functions of his office, the Executive Committee shall select a Vice President to act in his stead, and be clothed with the same powers; and he shall perform the same duties as the President until the next annual election.

Sect. V. It shall be the duty of the Vice Presidents to advance all the objects of the Association in their several districts; to explain to Agriculturists the character and objects of this Society, and endeavor to obtain their co-operation and support; to watch the advance of Practical Agriculture, and make known the results of the same, by reports or otherwise, from year to year.

Sect. VI. The Executive Committee shall transact the general business of the Society, and shall designate the time and place for exhibitions, regulate the expenditures, and take such supervisory charge of the business of the Society as may best promote its interest, and shall have the supervision of the publications of the Society. This body shall elect its own Chairman in the absence of the President; four members shall constitute a quorum.

Sect. VII. The Treasurer shall keep an account of all moneys, and shall pay bills only after they have been audited by the Secretary and another member of the Executive Committee, and countersigned by the President of the Society, or the Chairman of the Executive Committee.

Sect. VIII. The duty of the Secretary shall be to correspond with persons interested in Agriculture. At each stated meeting he shall read such portion of this correspondence as may be of general interest; and it shall be his duty to carry out and advocate the views of the Executive Committee, in obtaining, arranging and publishing any information they may desire to have laid before the Agricultural community. He shall also keep the record of the minutes of the Society, and of its Executive Committee, and shall conduct the entire business correspondence of the Society.

Sect. IX. The annual meeting of the Society shall be held at the City of Washington, on the second Wednesday of January in each year, when all the officers of the Society, not otherwise appointed, shall be elected by ballot for the ensuing year; fifteen members shall

constitute a quorum. The Executive Committee, however, shall be competent, with the approbation of the Society, to appoint occasional meetings, to be held at other places.

Sect. X. This Constitution may be altered by any annual meeting, by a vote of two-thirds of the members in attendance, provided not less than fifty members be present.

OFFICERS FOR 1858.

President.—Gen. TENCH TILGHMAN, of Maryland.

Vice Presidents.—J. D. Lang, of Maine, H. F. French, of New Hampshire, Fred. Holbrook, of Vermont, John Brooks, of Massachusetts, B. B. Thurston, of Rhode Island, S. H. Huntington, of Connecticut, B. P. Johnston, of New York, W. P. Robeson, of New Jersey, David Landreth, of Pennsylvania, John Jones, of Delaware, Odin Bowie, of Maryland, Philip St. George Cocke, of Virginia, H. K. Burgwyn, of North Carolina, F. W. Alston, of South Carolina, Richard Peters, of Georgia, C. C. Clay, jr., of Alabama, M. W. Phillips, of Mississippi, J. D. B. DeBow, of Louisiana, Lucien Buttles, of Ohio, W. L. Underwood, of Kentucky, T. Fanning, of Tennessee, D. P. Holloway, of Indiana, B. F. Edgerton, of Wisconsin, H. C. Johns, of Illinois, T. R. Barrett, of Missouri, Michael Shoemaker, of Michigan, D. L. Yulee, of Florida, Guy Bryant, of Texas, LeGrand Byington, of Iowa, A. P. Bradford, of California, W. W. Corcoran, of the District of Columbia, Manuel H. Otero, of New Mexico, H. M. Rice, of Minnesota, J. H. Lane, of Oregon, D. Anderson, of Washington Territory, John M. Bernhisel, of Utah, B. B. Chapman, of Nebraska, F. M. Arney, of Kansas.

Executive Committee.—Henry Wager, of New York, J. McGowan, of Pennsylvania, Josiah Ware, of Virginia, Frederick Smyth, of New Hampshire, Henry Wilson, of Ohio, John Merryman, of Maryland, James W. Brown, of Illinois.

Treasurer.—B. B. French, of the District of Columbia, }
Secretary.—Ben. Perley Poore, of Massachusetts, } Offices at Washington, D. C.

THIS BULLETIN is published by the United States Agricultural Society for *gratuitous distribution* to its Life Members, and to those Societies with which it is in correspondence.

HORSE TAMING.—Mr. J. S. Rarey, of Ohio, is now in England, where he has astonished all classes of society by exhibitions of his miraculous power over the horse. One of these exhibitions was in the riding school at Windsor Castle, before the Queen, Prince Albert, and their suites. After Mr. Rarey had been left alone with a vicious colt, eighteen months' old, an hour and a half, the Royal party entered, and found him sitting on the colt's back, without holding a rein. The colt stood perfectly quiet; neither did it show any signs of fear when Mr. Rarey beat furiously on a drum which was handed him. Two other experiments demonstrated Mr. Rarey's complete power over the most restive or nervous horses, and Prince Albert expressed his gratification and thanks to the possessor of this wonderful secret. Major General Richard Airey, to whom it has been entrusted, (in confidence,) says there is nothing in the treatment but what any horseman would approve of.

Mr. Rarey has published a circular, in which he offers to communicate his secret to five hundred subscribers, who must either be noblemen or gentlemen. Each one is to pay a fee of ten guineas, in advance, giving a satisfactory reference before his name can be definitively received, and signing a compact not to disclose Mr. Rarey's art to others. When the five hundred subscribers' names and the five thousand guineas shall have been received, Mr. Rarey will commence teaching in classes, in the order of registration, at the private riding-school of His Grace the Duke of Wellington, which has been placed at his disposal.

The Buffalo Advertiser intimates that it is cognizant of the peculiar secret possessed by Mr. Rarey, and employed so successfully by him in subjugating the most vicious and unruly of the equine species. The principle, it is thought, is doubtless the same as that now in use by horse-breeders and horse-trainers in various parts of the country, and consists mainly in kind treatment, in subduing the fears of the animal, and accustoming him to unusual noises and objects. But there are other influences, somewhat of a mesmeric character, and employed as adjuncts, that go to ensure the more complete success of the horse tamer, such as caresses, the use of drugs agreeable to the horse, scratching in parts not easily reached by the animal itself, giving food or water, after a long abstinence has occasioned hunger or thirst, the careful use of various tones of the human voice, &c. The chief secret, however, according to the Advertiser, which paper has the authority for its statement from those who understand and practice the art, consists "in raising one of the fore feet of the horse, doubling the knee, and keeping a strap around the fetlock, fastening the foot close to the arm or shoulder. The horse then stands upon three legs. Having next put on a surcingle, pass a long strap or rein through the surcingle, and fastening one end of it around the fetlock of the other fore foot, attach the other to the surcingle, after the animal is thrown, so closely as to deprive it of the use of the limb. In this item the treatment may be varied by fastening the second fetlock to the arm or shoulder after the animal is down." This plan, says the Advertiser, is successfully pursued by many skilful horse-breakers in western New York, and the horse yields to the necessities of the case—his spirit of opposition is broken.

THE LOCUSTS.—Gideon B. Smith, of Baltimore, Md., who has made the locust a special study, with reference to the periodicity of visitation, announces that the Southern tribe of thirteen years locusts will appear during this spring in Mississippi and Louisiana, and during the spring of 1859 in Alabama and Georgia.

CONGRESSIONAL LEGISLATION ON AGRICULTURAL MATTERS.—*The Senate* (it may not be generally known) has abolished its Committee on Agriculture—a significant proof of the little regard generally paid to this great interest of the nation at the Capitol. The Committee on Public Lands have under consideration a “Memorial of the members of the Board of Education of the State of Michigan, and of the Faculty of the Agricultural College of that State, praying a donation of land for the Agricultural College;” which was presented in the Senate on the 10th of December last, with similar memorials praying donations of land from the “Farmers’ High School of Pennsylvania,” the “New York State Agricultural College,” and the “Farmers’ College of Ohio.”

The House Committee on Agriculture meets frequently, and has given earnest consideration to the Land Bill introduced by Mr. Morrill, on the 14th of January, which it has adopted almost unanimously, and authorized him to report to the House. A large number of petitions and memorials have been received in support of this Bill, which appropriates 6,330,000 acres of land, to be distributed according to federal representation for the establishment and encouragement of Agricultural Colleges. It is thought that the bill will pass, and this number of the *Bulletin* has been delayed, in the hope that it would have been received and favorably acted upon by the House. The Committee has also under consideration a Bill establishing a “National Board of Agriculture,” a “Bill incorporating the United States Agricultural Society,” and other matters not yet fully matured. A memorial from Mr. Comstock on “Terra Culture” has been considered, and the opinion of the Agricultural Bureau of the Patent office has been obtained, but no report has been made.

THE MICHIGAN AGRICULTURAL COLLEGE, at Lansing, is in successful operation, under the direction of Joseph R. Williams, Esq., its President, aided by an efficient faculty.

THE FARMERS’ HIGH SCHOOL, in Centre county, Pennsylvania, will soon be in operation, under the judicious management of Fred’k Watts, Esq., of Carlisle, its worthy President.

THE MARYLAND AGRICULTURAL COLLEGE has been located about seven miles from this metropolis, on the Baltimore turnpike, and the buildings are to be erected immediately, under the supervision of Chas. B. Calvert, Esq., the energetic and well-qualified President. Under his direction, “science will instruct and enlighten routine, and intelligent observation of facts in daily experience, will correct and modify the too hasty deductions of science.”

AGRICULTURAL COLLEGE IN OHIO.—A bill to establish an Agricultural College in Ohio has been introduced into the Legislature. It appropriates \$50,000 for the purchase of a thousand acres of land, not costing more than \$25 per acre. The College is to be under the care of the State Board of Agriculture, and State School Commissioners. The system of instruction is to be similar to that in vogue in European colleges of this class—that is, beside a thorough English course, to embrace the sciences having any bearing on agriculture. Pupils living in Ohio shall always be admitted *free*, and in case of there being too many applicants for the accommodations, they shall be apportioned according to the population of each county. The professors are not to be paid over \$5,000 for the first year, and \$6,000 for the second; their salaries thereafter to be determined by the Board of Supervisors.

Col. WADE HAMPTON, who died recently, aged sixty-seven, was a native of South Carolina, and was educated at its State University, which he left at the commencement of the war of 1812, to accept a commission as Lieutenant of Dragoons in the United States Army. After serving, under his father, in the northern campaign, he retired to his plantation in the southwest, but again volunteered when New Orleans was considered in danger, and was appointed an aid to General Jackson in that memorable defence. His services in that battle were confidential and highly valuable, and the subject of the general’s warmest commendation. The war being over, Col. Hampton devoted himself to agricultural pursuits, in which he became deeply interested, and so continued to the time of his death. Long has he been at the head of those who have contributed to the best interests of his native State and of the whole South, by liberal, spirited and extensive efforts to improve the breed of domestic animals of every kind. In these departments he has been eminently successful, and enjoyed the proud consciousness of doing his State and the Union essential service by the exercise of constant and efficient exertions.

SCHWITZ CATTLE.—Mr. Barkley, of New York, is making arrangements to import in the spring a trio of Swiss or Schwitz cattle, from Geneva. The breed is described as quite as picturesque, with its dun color, black nose, black horns, and long bushy black tail, as the Alderney or Jersey. They are more hardy, much larger, better milkers, and will doubtless prove a valuable addition to our stock of fancy milch cows.

AGRICULTURAL OPERATIONS OF THE PATENT OFFICE FOR FEBRUARY.—The following unofficial abstract of what has been done by the General Government for the promotion of Agriculture during the past month, cannot but interest our readers. In the "Bureau" now in active operation, a foundation has been laid for the "Agricultural Department" which the Farmers of the United States claim as a right.

Introduction of the Tea-plant into the United States.—Mr. Robert Fortune, of England, has recently been sent by the Patent office to China for the purpose of collecting the seeds of the tea-shrub and of other plants; and is instructed to return with them to the United States in March, 1859, when he will make choice of localities for their cultivation. Investigations are now being made by this office, in connection with the Smithsonian Institution, for determining the soil and climate of those regions of the United States best adapted to the culture of this plant, as compared with similar conditions in China, the results of which will be made known in the next Agricultural Report. Mr. Fortune, it may be stated, was selected for this important mission from being peculiarly qualified to carry this enterprise into successful operation. It may be remembered that this gentleman was sent to China some ten or twelve years ago by the London Horticultural Society, where he wandered three years in the interior of the "Celestial empire," collecting seeds and plants, which have proved a great acquisition to the gardens of Europe, and, to some extent, to those of this country. In 1848 he was made choice of by the British East India Company to revisit the tea districts of China to collect the seeds of the tea-plant and introduce them into the Himalaya, which last mission has proved eminently successful, there being at the present time more than 1,500 acres in full bearing. The tea manufactured from this growth has already found its way into the London market, where it brings four times the price of the ordinary tea of China, in consequence of its superior quality.

It has already been ascertained that many portions of the United States, in respect to soil and climate, are well suited to the cultivation of tea, and that, with improved apparatus and other appliances of American skill, the leaves can be manipulated or otherwise converted into tea at an expense less than the actual cost of similar preparations in China, even with the low-priced labor of the Asiatics.

African Seeds.—Measures have been taken to procure a moderate supply of new and improved varieties of seeds from Kaffraria and the countries bordering on the channel of Mozambique and the Red Sea, among which are those of the African sugar-cane (Imphee) of the Zoulous Kaffers in its pure, unhybridized state. The following is a list of the seeds and cuttings ordered from Egypt: Summer Corn, (Dourah Séfie,) Syrian Corn, (Dourah Shami,) Dourah Corn, (Dara,) Rough Rice, (Rouze,) Lentils, (Adse,) Beans, (Foul,) Yellow Lupines, (Termess,) Red Wheat, (Hanta Sa idi,) White Wheat, (Hanta Beheri,) Barley, (Sheir,) Sesame, (Semsem,) Flax-seed, (Kettan,) Hemp-seed, (Souf,) Cotton Seed, (Cotne Hendi,) Indigo-seed, Water-melon, (Batikh Saidi,) Small Squash, (Kari Kossé,) Large Squash, (Kari estambouli,) Long Squash, (Kari Taril,) Cucumber, (Khiair,) Onion, (Bassal,) Date Seeds, (Naka Beleh Zaghloul,) Pomegranate seeds, (Roomman, Hedjazi,) Leek Seed, (Kourrat,) Artichoke, (Kharchouf,) Lettuce, (Rhass Beledi,) Melonkhia, Labakh, Sycomore Fig-seeds, (Gimmez,) Lotus seeds, Chark-felck, Cuttings of Seedless Grape, (Okel eneb Benati,) Cuttings of Ladies Finger Grape, (Savabe el seet.)

Gratuitous Distribution of Seeds.—A prevalent error exists in relation to the agency of the Patent Office in distributing seeds, cuttings, &c., among the agriculturists of the country. It has not at any time attempted to distribute assortments of seeds for general use. It simply aims at introducing from abroad the seeds of new plants, or of improved varieties of those already here, and of disseminating such as have been cultivated in this country in particular localities only; and it performs this duty chiefly by the aid of members of Congress and the agricultural associations in the several States, the object being, through either channel, not to gratify individuals by the bestowment upon them of curious and valuable products, but to promote the cause of agriculture by entrusting them to judicious hands for experiment. As stated in the Report on Agriculture for 1856, "it certainly never was the purpose of Congress to convert this office into a common seed-store intended to supply the public at large gratuitously with the means of planting their ordinary vegetable gardens.
* * * * * It requires no little care and discrimination to guard against a growing tendency to this species of abuse. The recipient of a package of seeds should be regarded, both by himself and others, as an agent who is willing to devote, gratuitously, a certain portion of his time and labor for the public benefit, and who acts under an implied pledge that, should the experiment prove successful, he will, as far as practicable, propagate and distribute, as from a new-centre, to all around him." It may also be stated that he might publish the results of his experiments in some agricultural or other public journal, and thus induce others to seek supplies of the same varieties from seedsmen or other sources, and so in turn contribute to the wealth and luxury of the country.

We learn that the Patent Office is overrun by applications for seeds, and that even the clerks and other employes in the several Departments of the Government are embarrassed

by requests of this character, which of course cannot be complied with; and, not only this, but that members of Congress are importuned to an incredible degree by correspondents, each of whom often plainly indicates that he expects to be supplied with "a general assortment" of vegetable and flower seeds, roots, bulbs, cuttings, &c. One gentleman, we are assured, now has upon his table, unanswered,—and perhaps necessarily to remain so,—several hundred letters of this character.

The idea that what the Patent Office has done in this respect has operated to the detriment of the interests of seedsmen—as has been asserted—is not only fallacious, but is in direct antagonism with the truth. On the contrary, it has created an increased demand for new and improved seeds, implements of husbandry, concentrated manures, and all the merchandise vended by these persons; and, within a very brief time, has doubled the quantity of seeds, cuttings, &c., imported by the trade from foreign countries, the value of which, last year, amounted to nearly a million dollars.

The purpose of "testing" necessarily implies that the plants distributed are not all known to be of superior quality and perfect adaptation to our soil and climate. Occasional failures, therefore, cannot be justly regarded as disparaging circumstances. But in many instances, plants of great value which had long been cultivated in certain States, were almost unknown in other localities, until their seeds were transmitted thither by the Patent office; and persons to whom they had always been familiar, but who were not conversant with the fact that they were not everywhere known in culture, have remonstrated against what they have deemed a useless service. The seeds of forest trees have thus been carried to prairie regions, where the rivers could not float, the winds could not waft, and the birds of the air could not convey them, and yet where they are found to germinate and grow. The Improved King Philip Corn, the production of which was previously confined to a limited region of country near the coast, has proved a blessing to the Northern and North-western States. Various improved garden products also might be named in this connection, were it necessary for illustration. The Japan pea has been transplanted from the West to the East; the New Mexican White Flint Corn from the South-west to the North-east; Wild rice from West to East; and forest trees and grape cuttings are in progress of interchange. But it is presumed that the beneficial effects of these distributions are at this day almost universally acknowledged.

Considerable quantities of improved varieties of field and garden seeds from England and France, and of Chufas and sweet potatoes from Spain, have been distributed during the past month. It is hoped that the purposes of the Office, as herein explained, may be appreciated by those to whose hands they have been committed.

The present Commissioner of Patents, Hon. Joseph Holt, leaves nothing undone on his part which can increase the usefulness and extend the benefits of the Agricultural Bureau.

ARIZONA COTTON.—Lieut. Mowry has placed on exhibition at the Secretary's office of the United States Agricultural Society, a sample of cotton raised from Arizona seed. It is that described by Major Gray as raised by the Pimos Indians, and resembles the Sea-island in its fine silky texture and long staple. Gen. Gadsden, in a letter to Lieut. Mowry, accompanying this cotton, says:

"You are aware, perhaps, that the black-seed cotton—hybrids of finer qualities which sea or salt air and superior cultivation has produced, in the Carolinas, Georgia islands, and now extending to Florida—is a native of the Gila, a river of Arizona. It is from this cotton that the finest Mexican seropes are manufactured. I was fortunate enough to obtain a handful of the seed from a friend at Fort Yuma, and have raised seed enough from it to restore it purely in this State. As these lower qualities of long cottons are getting in demand, I send enclosed a sample of the cotton as raised near this city, as it might be of interest to you and the friends of that newly acquired district, seeking to take a place in the cotton fields as well as silver products of that mineral region."

CORN IN NEW MEXICO.—The editor of the Santa Fe Gazette describes an year of corn, grown in that vicinity, seventeen inches in length; also five stalks and four "suckers," all of which sprouted from a single grain of the common sweet corn, and which together produced twenty-two ears—not one of the stalks failing to bear its quota. Upon one of these ears there are about nine hundred and fifty grains.

SHEEP-SHEARING MACHINE.—The Rochester N. Y. Union describes a Sheep-shearing Machine, made by Alexander Allen, of that city, for a gentleman of Louisville, Ky. This ingenious contrivance is said to be entirely practicable in its operation, and takes off the fleece closely and quickly, and it is impossible to cut the animal while using it. It is said that one hundred sheep can be sheared in a day by one man with this machine. The machine is simple, and a nicely executed piece of work.

PATENTS ISSUED FROM THE UNITED STATES PATENT OFFICE.—For the week ending February 2d, each bearing that date—Moses Bucklin, Grafton, N. H., improved cultivator tooth, having two shares.—N. Drake, Newton, N. J., improvement in corn-planters.—James Houck, Clinton, Ia., improvement in cultivators.—Joseph R. Linener, Cincinnati, Ohio, improvement in corn-shellors.—Solomon P. Moore, Arrow-rock, Mo., improvement in hemp-brakes.—W. R. Musser, Baltimore, Md., and John Coleman, Lynchburg, Va., improvement in the application of levers of tobacco-presses.—S. J. Orange, Graysville, Ill., combination of two harrows, which produces a continued rotation of each.—J. O. Ramage, Lafayette, Ala., improvement in ploughs.—J. H. Wiggin, Boston, Mass., improvement in seed planters.—J. A. Disbrow, Poughkeepsie, N. Y., arrangement of the windlasses, ropes, and followers of a cotton press, by which they protect the press-box from lateral pressure.—Jabez Robins, Leominster, Mass., rotary wheel harrow, with its toothed rim in adjustable sections, so that its dimensions may be varied, and with an adjustable roller-weight.

For the week ending February 9th, each bearing that date.—C. S. Dickerman, Lansingburgh, N. Y., hand-card with straight wire teeth for currying cattle.—Edward E. Hawley, New Haven, Conn., potato-planter, with cutting blade.—M. G. Hubbard, Penn Yan, N. Y., improvement in harvesters, by which the spring is attached directly to the finger-bar, the shoe being placed on one side thereof, and directly in the track of the supporting wheel.—Enos Page, Streetsborough, Ohio, new arrangement of spiral ring churn dashers.—Elias Peck, Canton, Ill., machine for cutting brush from cotton fields.—Aaron Van Duzen, Goshen, N. Y., new method of cutting grass or grain by a series of cutters attached to a bar, made to work with a curilinear motion through the slotted fingers, and the stationary cutters fixed to the fingers.—F. M. Walker, Greensboro', N. C., improvement in corn-huskers.—George Watt, Richmond, Va., improvement in ploughs.—T. B. Whyte, Greenwich, N. Y., improved machine for planting potatoes.—Lewis J. Chichester, New York, cotton-gin in which two rollers are grooved circumferentially, and fitted together in the same place, so that the projecting flanches of each roller will work in the flanches of its fellow roller.—A. R. Davis, East Cambridge, Mass., improvement in corn-huskers.—Daniel Lombard, Boston, Mass., do.—Joshua Fairbank, administrator of J. B. Fairbank, deceased, improvements in hand corn-planters.

For the week ending February 16th, each bearing that date.—Chester Barton, Savoy, Mass., seeding-machine, of which the distributing arrangement and pressure rollers can be raised and kept free from the ground while the machine is being drawn from place to place.—H. D. Baker, Pittstown Corners, N. Y., oscillating chair-churn, by which a person "rocking" can churn butter without any further trouble.—Albert D. Briggs, Springfield, Mass., intermittingly vibrating gate and moving apron for harvesters, by which the grain cut is formed into sheaves.—John Drown, Huron, N. Y., field wire or rod fence.—Josiah Foster, Sandwich, Mass., arrangement for troughs around trees to contain liquid, presenting a barrier to insects or worms.—John Gore, Fredonia, N. Y., improved cutters for harvesters.—W. A. Horrall and R. G. Sirwell, Grayville, Ill., arrangement for connecting and adjusting three rotary harrows, with pressure rollers, which ensure their rotation with the forward movements of the machine, and at the same time make them conform to the inequalities of the ground over which they pass.—Charles Howell, Cleveland, Ohio, improvement in adjusting the castor truck of mowing or reaping machines.—J. W. Langdon, Marengo, Ill., extension reach for wagons.—Frederick Nisbuitz, Brooklyn, N. Y., improvement in harvesters, by which the sickle is raised by the draught-pole when the machine is turned or backed.—J. W. Patterson, Philadelphia, Pa., improved raking attachment for harvesters.—H. W. Randle, Barnsville, Ala., improvement in cotton presses.—Marshall Turley, Galesburgh, Ill., improved combination of ploughs.—Charles M. Vail, Susquehannah Depot, Pa., improved churn.—W. W. Van Loan, Catskill, N. Y., under cutter for ploughs, by which the land is cut horizontally below the surface, so that it may be the more easily turned over by the mold-board during the next cut.—Jacob V. A. and Andrew Wemple, Chicago, Ill., automatic rake for harvesters.—F. W. Witting, Yorktown, Texas, press for compressing cotton laterally and vertically by the same application of power.—E. H. Bloodworth, Thomaston, Ga., improvement in ploughs.

CALIFORNIA STATE AGRICULTURAL SOCIETY.—The Board of Managers of the State Agricultural Society, for 1858, met at Sacramento during the second week in January, and spent several days in preparing for the next Agricultural Fair, which is to be held in Marysville, next fall. John C. Fall, of Marysville, is President, and O. C. Wheeler, of Sacramento, Corresponding Secretary. The *Union* says, that according to the recent amendment of the Constitution, the office and rooms of the Society are to be at once established in Sacramento, and other steps taken to insure increased action and usefulness for the future. A renewal of the appropriation from the State will soon be asked for at the hands of the Legislature, as recommended by the Governor in his recent message.

THE SMITHSONIAN INSTITUTION.—The system of meteorology, established under the direction of the Institution, (and in which the Patent office has co-operated for several years,) is still carried on. The number of observers on the 1st of January was three hundred and thirteen, who record their observations every day at 7 o'clock a. m. and 2 and 9 o'clock p. m.—sending monthly returns. Quite a number of these observers are furnished with full sets of standard instruments, and the system is increasing both in precision and in magnitude. Regret is expressed, however, by Professor Henry, that the observers are not more uniformly distributed over the whole country; for while the northern and eastern States are abundantly supplied, the southern and western are deficient, particularly Indiana, Kentucky, Tennessee, Mississippi, Arkansas, Louisiana, and Texas.

The reduction of the registers is continued by Prof. Coffin. He has completed those for 1854, 1855, and 1856, and is now engaged on those for 1857. A summary of the more important reductions for 1854 and 1855 was given in the Report of the Patent office for 1856, and hope was entertained that an arrangement could be made by which the whole series would be published at the expense of the General Government. But this expectation has not been realised, and the Institution has commenced to stereotype the work on its own account. Copies of the stereotype impressions are forwarded, from time to time, to observers, as they become ready for distribution.

The great object in view in regard to this branch of science, at the Smithsonian Institution, is to furnish materials which all who are so disposed may study, and from which deductions may be made as to the peculiarities of our climate, or the general meteorological phenomena of the globe. Of the especial relations of meteorology to Agriculture, Professor Henry says, in his last report:

“We cannot hold out the idea that great results are at once to be obtained for the improvement of agriculture, and the promotion of health and comfort, by a system of meteorological investigation. There are no royal roads to knowledge, and we can only advance to new and important truths along the rugged path of experience, guided by cautious induction. We cannot promise to the farmer any great reduction in the time of the growth of his crops, or the means of predicting, with unerring certainty, the approach of storms. But in the course of a number of years the average character of the climate of the different parts of the country may be ascertained, and the data furnished for reducing to certainty, on the principle of insurance, what plants can be most profitably cultivated in a particular place; and it is highly probable that the laws of storms may be so far determined that we shall be able, when informed by the telegraph that one has commenced in any part of the country, to say how it will spread, and whether it may be expected to extend to our own locality. We make these remarks in order to prevent disappointment and the evils produced by exciting expectations which cannot possibly be realized.”

CAMELS.—The following extracts from the official report of Lieut. Beale, describing his journey from Texas to California with the camels recently imported by the U. S. government, show that these “ships of the desert” are admirably adapted to New Mexico. He says:

“Unsupported by the testimony of every man of my party, I should be unwilling to state all that I have seen them do. Starting with a full determination that the experiment should be no half way one, I have subjected them to trials which no other animal could possibly have endured, and yet I have arrived here not only without the loss of a camel, but they are admitted by those who saw them in Texas, to be in as good condition to day as when we left San Antonio. In all our lateral explorations they have carried water sometimes for more than a week, for the mules used by the men, themselves never even receiving a bucket full to one of them.

“They have traversed patiently with heavy packs on these explorations countries covered with sharpest volcanic rock, and yet their feet, to this hour, have evinced no symptom of tenderness or injury. With heavy packs they have crossed mountains, ascended and descended precipitous places, where an unloaded mule found it difficult to pass even with the assistance of the rider dismounted and carefully picking its way. I think it would be within bounds to say that in these various lateral explorations they have traversed nearly double the distance passed over by our mules and wagons.”

The last mail from California brings intelligence that this party of camels were at Fort Tejon, but would probably be sent to Fort Yuma, for use between that and the various posts in New Mexico. It is said that a company has been organized in Texas, to procure a herd of camels for private use.


THE INDIANA STATE BOARD OF AGRICULTURE have arranged their premium list for the next Fair. The amount of premiums has been fixed at \$8,000, to be paid in cash. It has been determined to hold the Fair at Indianapolis, on the grounds heretofore occupied, without enlargement or extra expense.

UNITED STATES AGRICULTURAL SOCIETY.—The Library and Secretary's office has been permanently established at No. 356 Pennsylvania avenue, Washington city, and is open every week-day from nine o'clock a. m. until noon. It is the intention of the officers of the Society to make this a rendezvous, "where all those connected with agriculture who visit the metropolis may meet as brothers at a common home, and find a collection of objects in which they have a common interest."

Donations of books for the library, of minerals for the cabinet, of models of agricultural implements, and of agricultural periodicals and newspapers, are respectfully solicited, and will be acknowledged. The services of the Secretary are placed at the disposal of all agricultural organizations in the United States, who may wish information or assistance at the seat of Government.

THE SOCIETY'S MEDALS awarded at Syracuse and at Louisville in 1857, will positively be ready for distribution early in April. The execution of the dies has required more time than was anticipated, but they are completed, and the beauty of the medals will atone for the delay.

LIFE MEMBERS of the United States Agricultural Society are entitled to the use of the Library, to free admissions to the Exhibitions, to the annual volume of Transactions, to this *Monthly Bulletin*, and to an elegant Diploma.

 All gentlemen interested in the advancement and recognition of Agriculture, are respectfully invited to become Life Members of the Society. The admission fee of ten dollars (which is the only payment required) can be remitted by mail to the Treasurer, Major B. B. French, Washington City.

LISTS OF OFFICERS FOR 1858 are respectfully solicited from State Boards of Agriculture, State and county Agricultural Societies, and Farmers' Clubs. Also, the time and place of holding the next annual Exhibition.

EDITORS who may kindly send their periodicals or newspapers to the Library of the United States Agricultural Society, will have them directed to "*The Bulletin, Washington, D. C.*"

HISTORICAL NOTES AND QUERIES.—In the "minutes of the Philadelphia Society for the Promotion of Agriculture," under date of April 8th, 1806, there is a recommendation that an account of a machine for hulling clover "be published in the newspapers, and communicated to the Agricultural Society at Washington." Was there, at that time, an Agricultural Society at the then recently established metropolis?

———— *Historical sketches* of "the South Carolina Society of Agriculture," "The Philadelphia Society for Promoting Agriculture," "The Massachusetts Society for Promoting Agriculture," "The Connecticut Society for Promoting of Arts, Manufactures and Agriculture," "The Agricultural Society of New York," "The Agricultural Society of the Province of New Brunswick," and such other Agricultural Societies as were formed on the American continent during the last century, are being prepared for publication in this *Bulletin*. Gentlemen who may have in their possession facts concerning these societies will confer a favor by informing the Editor.

———— *The first Agricultural Medals* awarded in the United States, were from a die ordered by the "Philadelphia Society for Promoting Agriculture" in September, 1785. The device as described, represented: "Industry, driving a yoke of oxen in a plough, and guiding it with both his hands; Peace following, crowned with the *New Constellation*, and supporting over her right arm a cornucopia, teeming with the choicest products of the earth. Over the figures the sun in meridian splendor. On the exergue this motto—*Inter est Omnium*." The first die, cut by Mr. Reynolds, was rejected by the Society, and a second one was cut by Mr. James Trenchard.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.—No. XL. of the Journal, which is the second part of the eighteenth volume, contains: Statistics; Meteorology; Public Health; Price of Provisions; Report on Steppe Murrain or Kinderpente, by James Beart Simons; Paper on Howe's Shoeing, by Wm. Miles; Paper on the Manurial Properties of clay from gas works, by the Rev. W. R. Bowditch; Time on entry on farms, by the Rev. William Holt Beever; paper on paring and burning, by Dr. Augustus Voelcker; Communications on the relative values of cattle-box Manure and farm-yard Manure, by Charles Laurence; Elementary introduction to the subject of vegetable physiology, by Arthur Henfrey; Report on the exhibition and trial of implements at the Salisbury meeting, by C. Wren Hoskyns; Paper on Road-mending, by the Hon. William G. Cavendish; Agricultural Chemistry—on the growth of Barley by different manures, contiguously on the same land, and on the position of the crop in rotation, by J. B. Lawes and Dr. J. H. Gilbert.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, APRIL, 1858.

[No. 3.]

VISITS TO THE FARM SHRINES OF AMERICA. *The Birthplace of Washington.*—Col. John Washington, who came with his brother to America in 1657, settled on the bank of Bridge's creek, a small inlet of the Potomac, where he thenceforth lived, and where he was buried. He had two sons and a daughter, and it was to the second of these sons, Lawrence Washington, that "the proprietors of the Northern Neck of Virginia" granted a tract of land at the mouth of Pope's creek, on the 24th of June, 1696. Lawrence Washington was thus an *original proprietor*, and in his will, which is dated March 11th, 1698, he says: "I give the tract of land where I now live" to John Washington. Other bequests are made to his second son, Augustine, and to his daughter, who was named Mildred, after her mother. But John removed to Gloucester county, and sold the Pope's creek estate to Augustine, the father of George. This is shown by the will of Lawrence Washington, and by the deed from John to Augustine, which, after diligent research, I have found in the archives of this county, duly recorded.

Nothing now remains at the Bridge's creek but the burial ground and vault in which are interred the remains of the father, grandfather, and great-grandfather of the *Pater Patriæ*, with those of their respective families. The vault where so many of the Washington family are interred is in an open field and unenclosed. A small space around it is covered with grass, briars, shrubs, and a few small trees. Itself can only be distinguished by the top of the brick arch which rises a little above the surface. The cavity underneath has been very properly filled up with earth by Mr. Lawrence Washington, one of its late proprietors, to prevent the bones of the dead being taken away by visitors, who had begun thus to pillage it. Not far from the vault was a large slab lying on the ground, with the name of the family and two children.

The "birthplace" is nearly a mile distant, upon a somewhat elevated plateau, around which sweeps, in a semi-circular curve, Pope's creek, just before it empties into the broad Potomac. An inlet lies directly before the mouth of the creek, adding much to the beauty of the scenery, while far across the river is the graceful outline of the Maryland shore. The bank at the birthplace is about twenty-five feet high, quite steep and wooded, while the creek, like the classic Avon of Old England, may be called a poet's stream. Undisturbed by all sounds of traffic, it winds its useless way through green marshes and wooded acclivities, which seem to have ever been sacred to solitude, and the prominent natural features of the landscape can have changed but little since Washington's infancy. The chance visitor can look upon the same scenery upon which that child looked, as truly as he can gaze upon the same blue sky and see its image in the same blue water.

The house in which George Washington was born was destroyed by fire soon after the family left to reside on their Staffordshire estate near Fredericksburg. A subsequent proprietor "either repaired one of the outhouses or a wing of the old one, or built a small house for his overseer out of the old materials." So says Bishop Meade, and I am inclined to think the latter supposition correct from the appearance of the chimney of this second structure, which is all of it that remains. Yet near it the filled up cellar of the "birth mansion" is plainly visible, and the plough has turned up several bricks, pieces of earthenware, and other mementos. Close by a luxuriant clump of fig trees and other bushes mark the garden ground, and a few daffodils bloom along the edges, where the matted roots of the fig trees resist cultivation. There is also a solitary apple tree, said to be the last survivor of an orchard immediately around the house, but I searched in vain for a scion suitable for grafting, for the recent severe winters have evidently destroyed all lingering vitality.

A small monumental slab, sadly mutilated, lies upon the ground in the clump of fig trees, where it was removed from the site of the "birth mansion." It originally bore this inscription: "Here, the 11th February, 1732, Washington was born," and was placed there by his ward, G. W. P. Custis, in June, 1815. Mr. Custis, accompanied by some friends, carried the slab to Pope's creek in his yacht, the "Lady of the Lake," and after they had deposited it they returned on board, and fired a Federal salute from a swivel which they had brought for the

purpose. It so happened that the good people of the vicinity had been much harassed by the British during the war just concluded, and when they heard the firing they supposed that hostilities had been re-commenced. The whole country was alarmed, the children and women prepared to start for the pine woods on the ridge, and the men gathered for defence.

It is due to the Washington family to say that when Col. Geo. C. Washington sold "Wakefield," which comprises the "Bridge's creek" and the "Pope's creek" estates, on the 13th of October, 1813, to John Gray, of "Traveller's Rest," near Fredericksburg, he reserved sixty feet square of the ground around the birthplace and twenty feet square around the vault. In February, 1856, Colonel Lewis W. Washington (son and heir-at-law of George C. Washington) presented these reservations "to the mother State of Virginia in perpetuity, on condition solely that the State require the said places to be permanently enclosed with an iron fence, based on stone foundations, together with suitable and modest (though substantial) tablets, to commemorate to the rising generation these notable spots." Governor Wise accepted the donation, and addressed a message to the Legislature, asking an appropriation to comply with these conditions, which was, after some discussion and postponement, granted.

The plateau on which the birthplace is situated is this year lying in fallow for a wheat crop. The soil is easily tilled, and is filled with small oyster shells, which are found in abundance on most of the points on the lower Potomac. At the time of Washington's childhood tobacco was undoubtedly the staple crop, although in an old ledger of that epoch, kept within a few miles of the birthplace, I found entries of sales of wheat, rye, corn, oats, and "broad clover seed." The same authority shows that they used "ploughs," "grubbing hoes," "plough-hoes," "wedding hoes," and "sithes." There are charges for "pickled pork," "stalled beef," and "mutton," and one gentleman who lived near the birthplace paid £2 10s. "for braking two yoak oxen."

It is natural to suppose that Washington's life-love for rural pursuits was fostered at Pope's creek, where he resided until he had passed the first septennial boundary-mark of existence. There is no reason to believe that he was ever there a

———"Whining school-boy, with his satchel
And shining morning face, creeping like snail
Unwillingly to school."

But after he had left "the nurse's arms" it is probable that, in company with his elder brothers, he enjoyed those athletic sports, rural amusements, and soil recreations in which the youth of that time indulged, and which were well calculated to nurse his intellect into its wondrous strength. How I wished this morning for the magic mirror of Agrippa, or the wondrous second sight of the Rosicrucians, that I might call for a re-population of the scene as it was when little George Washington, with his "big brothers," used to work in the garden, ride the horses to water, swim the creek, play at quoits, or join in a game of bandy.

The estate now belongs to John E. Wilson, Esq., (who is connected by marriage with the Washington family,) a gentleman whose courtesy and hospitality I acknowledge with gratitude. He has erected a commodious residence, which commands a panoramic view of rare beauty, extending along the picturesque shores of the Potomac, with the "birthplace" in the foreground. The land bears marks of good cultivation, and the "negro-quarters," in a grove of pine trees at some distance from the house, are neat and comfortable.

Before leaving the birthplace I obtained a cane from an old and gigantic grape-vine which grows upon the bank of the creek, at a place where the chimney of the old mansion must have cast a sunset shadow. A souvenir from the first farm-home of the foremost American farmer, I trust it will be an acceptable gift to the Hon. Marshall P. Wilder, who has labored so assiduously to "speed the plough," and I will say, as did Dr. Franklin when he bequeathed his walking-stick to Washington, "If it were a sceptre he has merited it, and would become it."

B. P. P.

AGRICULTURAL STATISTICS.—At a large meeting of the New York Geographical and Statistical Society, held on Thursday evening, March 25, an *Agricultural Section* was organised, and Mr. John Jay read an interesting paper on "The Character and Statistics of American Agriculture, and its relation to the Bread Question in Western Europe." Resolutions were adopted urging the General Government to make the agricultural schedule of the census of 1860 as complete as possible, inviting suggestions from gentlemen all over the country on agricultural subjects, and asking the Governors of the States for copies of their census and other documents.

HORSE SHOW AT LOWELL.—The North Middlesex Agricultural Society will hold its Fourth Annual Exhibition in Lowell on the 15th of September. The following two days will be devoted to a horse exhibition, at which about \$300 will be paid in premiums.

CONGRESSIONAL LEGISLATION ON AGRICULTURAL MATTERS IN MARCH.—*The Senate* received and ordered to be printed the report of Mr. John Clairborne, who was some time since appointed by the Commissioner of Patents as a special agent to collect information as to the consumption of cotton in Europe. He was instructed at the time to ascertain the amount of cotton consumed in the manufactories of each city, district, or county, either in Europe or any other portion of the earth where cotton is manufactured, the amount of capital invested, &c., with all kindred information. The result of his labors will be one of the most valuable "Public Documents," ever issued by the United States Government, and we regret that we have not space for even a sketch of its contents.

IN THE HOUSE OF REPRESENTATIVES a bill has been introduced by Mr. Gilmer, of North Carolina, to prevent the accumulation of an unnecessary surplus in the Treasury, and to equalize the grants of lands to the several States. This bill provides, in substance, that in all cases hereafter when donations or gifts of the public lands are made by Congress to any State, or to any company or corporation of any State, a like quantity of land (in proportion to the representation of the States) shall be due and granted to all the other States.

THE WHEAT CROPS.—The accounts of the growing wheat crop, from all of the grain-growing States, are favorable. In the western States, the quantity of land sown with wheat in the fall was larger than the previous year, the weather during September being especially favorable for it. At the commencement of winter, the growth was more forward than for many years; the winter has been quite favorable, in all the States, and the prospect of an abundant crop was never more favorable at the close of the month of March. Many express the fear, however, that the plants are too thick on the ground, and that, with favorable growing weather during April and May the growth will be too rapid, producing a weak plant, and inducing rust or "lodging." It seems to be generally conceded that the crop is past the dangers of winter, and that it will do well until about the first of June, when the next crisis of the crop comes.

AGRICULTURE IN FRANCE.—The Emperor Napoleon is exerting himself to introduce into France all the agricultural improvements which have of late years been adopted in England, such as steam ploughs, reaping machines, &c. His majesty is also indefatigable in his efforts to improve the breed of French cattle.

VALLEY OF THE RED RIVER OF THE NORTH.—From Prof. Hind's report on the Canoe route to the Red River settlement, lately made to the Canadian Government, we learn that the area of cultivable land of the first quality in the Red River and its affluent, the Assiniboine, within British territory, exceeds 1,200,000 acres. This does not include the Upper Assiniboine or its affluents. The area well adapted for grazing purposes in the same valley exceeds 3,000,000 acres. Of the advantages of this district as an agricultural country, the report says:

"It embraces a vast area of remarkably fertile, deep, and permanently arable soil. All crops cultivated in Canada succeed well, and often show an average yield far in excess of Canadian returns. All necessities of life, with the exception of iron and fuel, are found in great abundance in Red River valley. The probable existence of tertiary coal or lignite is noticed above.

"The climate of the agricultural season is well adapted for all the operations of husbandry. Corresponding observations show that the summer temperature is three or four degrees warmer than at Toronto."

IMPORTATION OF LAMAS.—A flock of forty-two Lamas have recently been imported into this country from Guayaquil, in Ecuador, South America. They were brought across the isthmus on the railroad, and re-shipped at Aspinwall for New York, under the care of an intelligent naturalist and two herdsmen. They have been imported into this country under the belief that they can be successfully introduced into the wool-growing districts of the eastern States, and become more valuable than sheep. They produce the finest description of alpaca wool, equal to the best cashmere, and if found to flourish in this country, the result must be highly advantageous, the wool being worth nearly double the value of sheep wool, that is, as an article of export. The shearing seasons are twice a year, and at each time an animal will yield between sixteen and twenty pounds of wool. They generally attain the size of a small jackass, weighing from 150 to 300 lbs., and live about eighteen years. As beasts of burden they are somewhat useful, being capable of carrying 150 to 200 lbs. weight. They subsist on the coarsest herbage of the barren regions of the Andes, and, it is believed, are well adapted to the climate of Maine, New Hampshire, Vermont, &c. Their flesh is esteemed very highly as an article of food, being equal to the best venison. So valuable are these animals considered in Peru and Bolivia, that the most stringent measures are adopted to prevent their being exported.

AGRICULTURAL OPERATIONS OF THE PATENT OFFICE FOR MARCH.—We regret to learn, unofficially, that the publication of the Agricultural Report of the Patent Office will this year be delayed, by a resolution recently passed in Congress which requires that all reports and documents shall be handed in complete. Heretofore a *programme* of the Agricultural Report has been accepted early in each session, and the publication commenced at once, the compiler furnishing "copy" as the printing progressed.

Among other illustrations in the following report, will be a portrait of "Duke," a Suffolk draft horse, the property of the late Mr. Catling, of Woodbridge, Suffolk, which gained the first prize of thirty pounds, at the show of the Royal Agricultural Society of England, at Windsor, July, 1851, painted by Wm. H. Davis, of Chelsea, England, who has been engaged for upwards of forty years in painting prize animals in Great Britain.

Mr. Henry C. Williams, who was last fall dispatched by the Patent Office to make explorations in Western Arkansas, part of the Indian territory, and Northern Texas, for the purpose of obtaining information respecting the grape vines of that region, and making collections of the same, returned about the middle of March. He explored the region extending from a little east of Fort Smith on the Arkansas, to the Lower Cross Timbers in Texas, and includes a considerable portion of the Choctaw Nation. Eight hundred miles of this he traversed on foot, examining and collecting. He brought back a large number of cuttings and roots of the native vines, which the Commissioner of Patents has had so planted as will ensure their propagation.

Mr. Williams left soon afterwards for the "Cherokee country," Upper Georgia, to obtain scions of the celebrated apples for which that region is justly famous. These apples originated from seed sent by order of President Jefferson for gratuitous distribution among the Cherokees. Several varieties ripen in May and June—others are later, and will keep the entire year.

Mr. Robert Fortune, whose appointment as agent to China for the purpose of collecting seeds of the tea-shrub was mentioned in the last *Bulletin*, wrote a letter under date of "London, March 1st, 1858," from which we are permitted to make the following extracts:

"I have now to inform you that in compliance with instructions, I have taken my passage for China, and sail from Southampton on the 4th instant.

"It shall be my careful study to accomplish the important objects which you have entrusted to me, and you may rely on my not submitting to exorbitant charges, and on my acting in good faith to the Government of the United States.

"I have had so much experience in packing and shipping seeds and plants from China to India and England, that I venture to suggest to you that my operations should be conducted in the following manner. It will be imprudent to trust my collections in one or two vessels, as living plants are easily damaged during a long sea voyage. The more prudent course would be to ship by as many vessels as possible, say six or eight. But as this will occupy some time, I think I had better come home by the overland route, and bring the seeds (not tea-seeds) with me, and endeavor to reach America as early as possible, in order to receive the plants on their arrival. If, on the contrary, I accompany the last shipment, *via* the Cape, the first would necessarily be home several weeks before I could be upon the spot to examine it and do what is needed. My object in offering this suggestion is to secure, if possible, the success of my mission, and I have no doubt you will agree with me in the propriety of such a course of procedure."

A NEW COTTON IN TEXAS.—Mr. D. C. Sharpe, of Cherokee county, Texas, has sent to New Orleans specimens of cotton grown by him from seeds brought from Nicaragua, near Leon, in the mountains. It is the third year's production, on land lying near the 32d parallel of latitude, in a prairie country, the soil of which is sandy and saline, crystals of salt, saltpetre and alum being naturally formed on its surface. The stalk and bolls of this cotton, Dr. Sharpe states, are about as large as those of the Petty Gulf cotton; the seeds are much smaller, black and smooth, as a consequence of which, 1,000 pounds of it unginned yields 500 pounds of ginned cotton. But it is the lint of this cotton that is most noteworthy and remarkable. For fineness and silkiness, as well as tenacity of fibre and tenuity of thread, it has never been surpassed, if at all equaled. These qualities have led some to believe it the Sea Island cotton; but Dr. Sharpe is convinced that it is not, since it differs from that cotton in many material respects, whatever may be the correspondence between their respective staples. For instance, he says that 250 pounds of this cotton can be picked by one hand in a day, whereas of the Sea Island not more than 30 pounds can be picked. He believes that it can be successfully grown in nearly every part of Texas. If so, it may go as a great element of a new agricultural era in that magnificent State.

VERMONT STATE FAIR.—The managers of the Vermont State Agricultural Society met at Bellows Falls recently, and decided to locate the next fair at Burlington.

REMONSTRANCE OF THE TOBACCO INTEREST.—A memorial has been presented to the President of the United States by W. M. Burwell, of Virginia, James Guthrie, of Kentucky, William Brewer, of Maryland, and Tench Tilghman, of Maryland, a Committee at the Southern Commercial Convention, assembled at Knoxville, in August, 1857, "to invoke the aid of the Executive in obtaining some modifications of the excessive burdens imposed by foreign governments upon raw and manufactured tobacco, the product of the United States."

The memorial (which can be found in full in the April number of *De Bow's Review*) is an able and interesting document, replete with valuable statistical information. It shows the importance of the tobacco interest in a national point of view, as also the oppressive and illiberal policy of which it complains, and asks "that our ministers in Europe shall be instructed to keep before the governments to which they are accredited the justice and expediency of a modification of the duties upon American tobacco, both to the producer and consumer."

The memorialists "also ask that our Government will not overlook any opportunity to exact such a modification by making it the basis of such reciprocal laws as may be asked at its hands by other governments," and they thus conclude their able memorial:

"But should these governments refuse to consider the subject in a rational and reciprocal point of view, it will become proper to inform them that the Government of the United States regards the present onerous duties on a principal American staple as inconsistent with the system of free trade and reciprocity, which it has established; and such governments should be assured that they cannot longer hope to be supported in part by a tax upon American labor.

"It is scarcely the province of your memorialists to designate the remedial measures to be pursued by the Government of the United States. They will, however, suggest, for consideration, two which have occurred to them.

"1st. That the Government of the United States should employ the earliest occasion, when foreign governments, imposing unequal and onerous taxes on tobacco, shall ask at its hands some commercial or other concession important to them, to require from such governments a proper reduction of such taxes.

"2d. That Congress shall impose upon the productions of such countries, imported into the United States, countervailing duties, equal in their effect to the taxes upon tobacco complained of.

"Your memorialists leave the question of the constitutional power and political expediency of these measures with the proper departments of the government. It is their province to bring their grievances before the government; it is the duty of the government to examine, and if possible to redress them. Should, however, the latter remedy suggested be adopted by the government, our fellow-citizens, who now enjoy an exemption from foreign duties, will at least have an opportunity to share in the burdens which oppress this persecuted interest. They will thus co-operate in the reduction of those burdens. The nations of Europe will be satisfied that republicans cannot be bribed by special favors shown to one sectional interest to conspire in the oppression and taxation of another.

"We cannot, however, anticipate that enlightened nations, connected with us by treaty relations of the most amicable and reciprocal character, will continue, against reason and remonstrance, a duty so unjust, excessive, and offensive as that which has so long rested upon one of the chief agricultural staples and commercial commodities of the United States, or that they will drive us to the extreme remedies suggested in this memorial. They will, we hope, promptly assent to such a modification of the duties upon tobacco as will alike promote the interests of the American producer and the European consumer."

ILLINOIS STATE FAIR.—The next Fair of the Illinois State Agricultural Society will be held on Tuesday, September 14th, and the following days of the same week, on the west side of the Central railroad, four miles south of Sandoval, and about two miles north of Centralia, opposite Central city. The area enclosed for the Fair grounds will be twenty acres of high rolling ground, with a fine grove upon it, and well watered, while outside there is a fine locality for encamping. The expectation and desire is that the farmers will come prepared to "camp out," and a thousand tents or white covered wagons dotting the picturesque vicinity of the Fair grounds, will add to the interest of the scene. Sleeping accommodations will also be furnished by the Illinois Central Railroad Company, the officers of which have promised to have "two miles and a half of empty cars" on the side-track at the ground every night, besides giving up the neighboring machine-shops and station houses. They have also liberally offered to transport all stock and articles destined for the Fair free of charge, going and coming, and will carry passengers at half the usual fare. The premium list amounts to the sum of \$16,000.

THE ST. LOUIS FAIR will be held this year during the second week in September.

PATENTS ISSUED FROM THE UNITED STATES PATENT OFFICE.—For the week ending March 2d, each bearing that date—Joseph Baker, Washington, D. C., machine for stoning cherries.—Thomas Blanchard, Boston, Mass., improved method of bending shovel handles.—J. S. Butterfield, Philadelphia, Pa., improvement in harvesters.—Willis L. Childs, Piermont, N. Y., improvements in harvesters.—Orman Coe, Port Washington, Wis., improvement in harrows.—Frederic Cook, New Orleans, La., improvement in metallic ties for cotton bales.—Peter S. Carhartt, Collamer, N. Y., improved field fence.—Wm. DeWitt and O. D. Barrett, Cleveland, O., improvement in harrows.—Thomas Denham and Joseph W. Briggs, Cleveland, Ohio, alarm sash balance.—Samuel Dennis, jr., Jasper, N. Y., improvement in hill-side plows.—Andrew Dietz, Raritan, N. J., improved farm gate.—Charles Howell, Cleveland, Ohio, improvement in mowing machines.—Warner Pickett and Andrew Hills, Naugatuck, Conn., improvement in corn huskers.—Jas. Powell, Cincinnati, O., improved hydrant.—Aaron Ring, Westbrook, Me., improvement in seeding machines.—Honore Roth, Iberville parish, La., improvement in method of setting sugar kettles.—Henry C. Smith, Cleveland, Ohio, improvement in harvester fingers.—Holly Skinner, Huron, Ohio, improved calendar clock.—Solomon Stransberry, Knoxville, Tenn., improvement in bee hives.—Hosea Southwick, Little Cooley, Pa., improvement in grinding mills.—Isaac Van Doren, Somerville, N. J., improvement in harvesters.—Isaac Van Doren, Somerville, N. J., improvement in rakes for harvesters.—Harvey Waters, Northbridge, Mass., improvement in manufacture of scythes.—Abner B. Weeks, Rockland, Me., improvement in lime kilns.—Eidridge Wheeler, Marlborough, Mass., improvement in horse shoes.

For the week ending March 9th, each bearing that date—H. F. Batcheller, Sterling, Ill., improvement in hand corn planters.—Hamilton J. Cox, Warren county, Ohio, improvement in sugar and cider mills.—William C. Doss, Texana, Texas, improvement in seed planters.—Edward L. Dorsey, Johnson county, Ind., improved machine for fitting wagon tires.—William Diller, Lancaster, Pa., improvement in lubricating the axle boxes of carriages.—Joseph and James L. Fagan, San Antonio river, Texas, improvement in corn huskers.—A. M. George, Nashua, N. H., improvement in machine for hulling rice.—Henry and Amos Hersh, Lancaster county, Pa., improvement in machines for cutting and crushing corn stalks.—Washington Hall, Brewer, Me., improvement in stump extractors.—David Hoke, Byhalia, Miss., improvement in plows.—Wm. K. Johnston, Rock Island, Ill., machine for excavating post holes.—J. H. Jones and N. W. Smith, Lebanon, Ohio, improved field fence.—Josephus Loving, Moscow, Tenn., improvement in cotton presses.—Joseph Redhead, Woodville, Miss., improvement in seed planters.—D. B. Rogers, Seymour Rogers, and Luman Rogers, Pittsburg, Pa., improvement in cultivators.—Henry C. Smith, Cleveland, Ohio, improvements in harvesters.—William Wise, Washington, D. C., improvement in trenching plow.—Francis L. Wilkinson, Adam's Run, S. C., improvement in cotton gins.—Daniel G. Greene, North Bridgewater, Mass., assignor to himself and Geo. H. Greene, of same place, improvement in corn shellers.—John Henn, New Britain, Conn., assignor to himself, Anton, Danl., and Leopold Lankan, Hartford, Conn., improvement in attaching tools to handles.

For the week ending March 16th, each bearing that date—Henry C. Beach, Philadelphia, Pa., improvement in grain winnowers.—C. B. Brown, of Alton, Ill., improvement in seed drills.—Robert Hamilton, Franklin, Ind., improvement in seed drills.—John Leidy, Lamar, Pa., improvement in grain cradles.—Solomon Oppenheimer, Peru, Ind., improvement in milking pail.—Lewis Roach, Covington, Ky., improvement in gang plows.—Grey Utley, Louisville, N. C., improvement in plows.—John Van Doren, of Farm Ridge, Ill., assignor to himself and B. Murray, Ottawa, Ill., improvement in dumping boxes for agricultural purposes.

For the week ending March 23d, each bearing that date—Timothy Brown, Georgetown, N. Y., improvement in casting metallic cheese-hoops.—H. W. Brown, Millville, N. J., improvement in cotton gins.—Ezra Cope and I. W. Bragg, Cincinnati, Ohio, improvement in oscillating pumps.—Plumer H. Chesley, Linn, Mass., improvement in meat choppers.—Aaron F. French, Franklin, Vt., (assignor to George I. Stannard, of St. Albans, Vt.,) improved binding attachment to reapers.—Calvin Dickey, Mercersburg, Pa., improvement in machine for cutting the leaves from the sugar cane preparatory to grinding.—O. R. Dinsmoor, Auburn, N. H., improvement in hay-cock protectors.—John M. Long, Peter Black, and Robert Allstatter, Hamilton, Ohio, improvement in harvesters.—Thos. McConaughy, Burnsville, Ala., improvement in plows.—Chas. Moore, Trenton, N. J., improvement in presses for extracting oil from linseed.—David G. Olmstead, Vicksburg, Miss., improvement in cotton bale ties.—Hiram Plumb, Honesdale, Pa., improved machine for turning tool handles, &c.—Hiram Ross, Rockport, Ind., improvement in cotton presses.—Thomas A. Risher, Circleville, Ohio, improvement in corn harvesters.—Heber G. Seekins, Elyria, Ohio, improved post for field fences.—Danl. L. Tilton, Mount Carmel, Ill., improvement in plows.

For the week ending March 30th, each bearing that date—Joseph Banks, Dadeville, Ala., improvement in cultivators.—I. V. Blackwell, Ovid, N. Y., improvement in machines for hulling and cleaning clover seed.—George E. Chenoweth, Baltimore, Md., improvement in

harvesters.—Asahel Cowley, Horpersfield, N. Y., improvement in horse-hay rakes.—John J. Eshleman, Lancaster, Pa., self-loosening horse and cattle tie.—James Grant, Rochester, N. Y., improvement in horse-power machines.—W. W. Hollman, Eddyville, Ky., improvement in straw cutters.—John A. Jordan, Shelbyville, Tenn., improved churn.—Wm. Stevenson, New York, N. Y., machine for shelling peas.—George Telford, Pike, N. Y., improved cross-cut sawing machine.—Wm. Van Anden, Poughkeepsie, N. Y., improvement in harvesters.—George S. Ball, Dayton, Ohio, assignor to Benjamin Kuhns, of same place, improvement in seed drills.—Peter Bergen, New York, N. Y., assignor to Jane Ann Bergen, of same place, improvement in corn shellers.—Judson Knight, Newark, N. J., assignor to R. W. Booth, Providence, R. I., improvement in the manufacture of hoes.—Samuel Thompson, Hopedale, Ohio, assignor to himself and A. W. Taggart, of same place, improvement in seed planters.—Henry Shrader, Burnsville, Ala., improvement in cotton presses.

NEW YORK AGRICULTURAL COLLEGE.—The first annual Report of the Trustees of the State Agricultural College has been submitted to the Legislature of New York by Governor King. The report contains a brief history of the early efforts of the friends of the College to enlist the support of the farmers of the State and the favor of the Legislature; of the success which attended these efforts, in the liberal subscription of \$45,000, principally by the farmers of the county of Seneca, and in the loan of \$40,000 by the State for twenty years, without interest. It further states that a farm of 700 acres, of great variety of soil, well wooded and watered, has been purchased in the town of Ovid, Seneca county, on the eastern slope of Seneca lake, on which the College buildings are to be erected; that the site of the College has been agreed upon, and contracts have been entered into for a portion of the materials to be used in the edifice; and that there is every reason to hope that, during the present year, the centre building and south wing will be completed and in readiness next spring to receive those who may desire to acquire a sound, practical agricultural education and training.

Appended to the report, is a statement of the amounts received from individuals and from the State, the manner in which they have been applied to the purchase of the farm, and in the outlay for managing and providing adequately the necessary stock and implements, leaving an unexpended balance of \$30,000 yet to be received from the State treasury. This sum, it is confidently believed, will enable the trustees to complete the centre building and south wing of the College, with the principal room for instruction and scientific purposes, and the necessary accommodation for one hundred and eighty students. The trustees declare their intention to make this, in fact as well as in name, an Agricultural College.

THE SUGAR CROP.—The annual statement of P. A. Champonier, after referring to the adverse circumstances attending cane culture in Louisiana, during the last year or two, speaks of the present condition of the crop with hopeful anticipations. It says:

As to the coming crop I will venture no speculative suggestion. The number of acres planted may be less than last year, but the rattoons, which failed almost totally then, now give promise to more than supply the deficiency of plat-cane with an ordinary propitious season, and the absence of the unusual circumstances which have weighed so heavily on the sugar interest of this State for the last three years. I have a conviction that the energy of our planters will enable them to overcome any ordinary difficulties, and that the result will show that the depreciators of Louisiana, as a sugar producing country, are very much in error.

In giving a recapitulation of the products of the several parishes, it is found that 1,294 sugar-houses have given an aggregate production of 270,697 hogsheads of sugar, weighing 307,666,700 pounds, allowing 1,100 pounds to the hogshead. This includes 240,308 hogsheads made under the old process, and 39,389 refined, clarified, and cistern. Steam is used on 935 plantations, and horse-power on 359. The production of molasses has been in about the same proportion as in former seasons, if not more abundant, so that the entire crop of molasses is put down at 19,578,790 gallons, against 4,882,380 the year previous. The Louisiana sugar crop for the last ten years is as follows:

Crop of 1848.....	220,000	Crop of 1853.....	449,324
" 1849.....	247,923	" 1854.....	346,635
" 1850..	211,201	" 1855.....	231,427
" 1851.....	236,547	" 1856.....	73,976
" 1852.....	321,934	" 1857.....	279,697

In Texas planters have not made over 2,000 hogsheads, owing to long continued dry weather, but they have succeeded in making a good planting for next crop.

THE AMERICAN POMOLOGICAL SOCIETY will hold its seventh session in the city of New York, commencing on Tuesday, the 14th of September. Hon. Marshall P. Wilder is the President.

EXPORTATION OF CATTLE.—Mr. George Latimer, of St. John's city, island of Porto Rico, has recently shipped there, from Baltimore, four full blooded Durham cattle, raised by Mr. John Evans, of York county, Pennsylvania.

BOOKS ON AGRICULTURE IN THE LIBRARY OF CONGRESS.—This subject received the early attention of the guardians of the Library, and was considered of fundamental interest to the prosperity of the country. Jefferson was one of the pioneer patrons of this noble and truly democratic science, and the books upon the subject, which belonged to his library, formed the nucleus of a fine collection, which was unfortunately destroyed by fire in 1851.

A splendid chapter has however been re-collected, and the works upon agriculture and horticulture number about one thousand volumes, aside from floriculture, landscape gardening, and other collateral subjects. This collection covers works in various languages, from the ancient classics to the present time, including many rarities in the Latin and French. The science is treated generally in the most valuable Cyclopædias, Dictionaries, and Manuals, in English and French, besides numerous special works upon particular topics, such as drainage and irrigation; silk, cotton, cane, maize, tobacco, sugar, flax, tea, and indigo culture; arboriculture, comprising lifting, transplanting, pruning, timber, and dry rot; cattle, horses, sheep, swine; wine making and the vine; grazing and wool growing; fruit culture, comprising the apple, pear, peach, pine-apple, &c.; potato, and the rot; poultry; husbandry; veterinary art; farriery; agricultural chemistry; implements; milk; gardening; manures, soils, guano, &c.; bees; hot and green houses; insects, birds, and other enemies to agriculture, including the wheat fly; agricultural tours and views of the modes of cultivation in various countries. The serial publications are also numerous, among which are, Hovey's Magazine of Horticulture, Downing's Horticulturist, Reports of the American Institute, Transactions New York Agricultural Society, Coleman's Agricultural Reports, Young's English Annals of Agriculture, Loudon's Gardners' Magazine, Royal Agricultural Society's Journal, Edinburg Agricultural Journal, Transactions of the Agricultural Society of Scotland, Transactions of the Highland Agricultural Society, London Farmers' Magazine, Cottage Gardener, Communications to London Board of Agriculture, Transactions London Horticultural Society, and the annual State Reports. The botanical chapter serves as a supplement to the agricultural, and comprises about fifteen hundred volumes, and the whole forms a source of information worthy of the Library of Congress.

THE EXECUTIVE COMMITTEE of the United States Agricultural Society will hold a quarterly meeting at the Society's Rooms, No. 356 Pennsylvania Avenue, Washington City, on Wednesday, April 28th, at seven o'clock, p. m. The Vice Presidents and Honorary Members of the Society are especially invited to be present.

THE THANKS of the Society are due to Senators Hammond and Wilson; to Messrs. Morrill, Comins, Davis, and Underwood of the House of Representatives; and to the editors of the *Homestead*, the *Real Estate Register*, and the *American Farmer* for contributions to the Library and Reading-room of the Society.

HENRY S. OLCOTT, Esq., one of the principals of the Mount Vernon Farm School, and an active Life member of this Society, is about to go abroad for the purpose of examining and studying the agriculture and the agricultural Colleges of England and Europe. He will correspond with some of our principal journals, and his letters will doubtless be as excellent as were the descriptions of the National Trial of Reapers and Mowers, for which the Executive Committee of this Society awarded him the large medal.

The Secretary of the United States Agricultural Society respectfully commends Mr. Olcott to the friendly notice of the officers of agricultural associations abroad, and will be pleased to reciprocate any attentions showed him.

HISTORICAL NOTES AND QUERIES.—Hon. B. V. French, of Massachusetts, has furnished some interesting documents concerning the early history of this Society. Any other gentlemen who may have facts or papers in his possession will confer a favor by sending them to the Secretary.

—“*Ploughman*,” requests a copy of the title-page of “*The Gentleman Farmer*,” a work on husbandry written by Lord Kaim, and published in England about the time of the American revolution.

VIRGINIA STATE FAIR.—The next State fair in Virginia is to be held at Petersburg, an arrangement having been made by which the State Committee is empowered to appoint the marshals, arrange the premiums, &c., and the Union Society bear all expenses. It is supposed that the amount of premiums to be awarded will exceed in the total \$3,500.

LIFE MEMBERS of the United States Agricultural Society are entitled to the use of the Library, to free admissions to the Exhibitions, to the annual volume of Transactions, and to this *Monthly Bulletin*.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, MAY, 1858.

[No. 4.

THE MEDALS OF THE SOCIETY ARE READY. The design of this fine work of art was drawn by Hammat Billings, of Boston, in accordance with the suggestions of Hon. Marshall P. Wilder. The die was engraved by Francis Mitchell, of that city, and the medals, of gold, of silver, and of bronze, have been struck at the United States Mint, in Philadelphia.



On the face is Ceres, (Goddess of the Earth, Patroness of Agriculture,) seated upon a throne. In her right hand, which is elevated and extended forward in an attitude of invitation, she holds a wreath of honor; in her left the sickle—emblem of agricultural industry. The reverse side is ornamented with a plough, and the great staples of the South, North, West, and East, encircling the name of the successful competitor.

EARLY HISTORY OF AGRICULTURE IN VIRGINIA.—*Indian Corn.*—In the year 1609, Capt. Smith, in reprisal for injuries done by the Indians, "took two salvages prisoners, called *Kemps* and *Tussore*, the two most exact villains in all the country." Not long after this the supplies of English grain being found much damaged by mould and rats, "this did drive us all to our wit's end, for there was nothing in the country but what nature afforded. Until this time *Kemps* and *Tussore* were fettered prisoners and did double task, and *taught us how to order and plant our fields*: whom now, for want of victual, we set at liberty, but so well they liked our companies they did not desire to go from us." "Thirty or forty acres we *digged* and planted."—I., 224, 227. What that method was he explains elsewhere, when speaking "of the fruits planted by the natives." "The greatest labor they take is in planting their corn, for the country naturally is overgrown with wood. *To prepare the ground they bruise the bark of the trees near the roots, then do they scorch the roots with fire that they grow no more.*" This custom of theirs it probably was, that suggested to our ancestors the process of *belting* or *girdling*, which killed the larger trees by cutting through the sap-wood, caused the fall of spray and lesser branches, and thereby admitted the sun and air to the crop cultivated in their intervals—a practice which, as compared with the method of clearing off the entire growth, enables the settler of new lands to increase the area of virgin soil under culture in more than geometrical ratio; which has kept pace with our ever-advancing frontier, and which more than any other has enabled the white race "to enter in and possess the good land which lay before them."—(See, also, *Beverly*, p. 183.)

"The next year," continues Smith, "with a crooked piece of wood they beat (dig) up the weeds by the roots, and in that mould they plant their corn. Their manner is this: They make a hole in the earth with a stick, and into it they put four grains of wheat (maize) and two of *beans*. These holes they make *four feet* one from another. Their women and children do continually keep it with weeding, and when it is grown middle-high, *they hill it*

about like a hop-yard. In April they begin to plant, but their chief plantation is in May, and so they continue till the midst of June. What they plant in April they reap in August; for May in September, for June in October. Every stalk of their corn *commonly* beareth *two ears*, some three, seldom any four, many but one, and some none. Every ear ordinarily hath betwixt two hundred and five hundred grains. The stalk being green hath a sweet juice in it, somewhat like a sugar-cane, which is the cause that when they gather their corn green, they suck the stalks: for as we gather green peas, so do they their corn, being green, which excelleth their old. They plant also peas they call *assentamens*, which are the same they call in Italy, *Fagioli*. Their beans are the same the Turks call *Garnanses*, but these they much esteem for dainties." "In May also *amongst their corn* they plant *pumpeons*, and a fruit like unto a muskmelon, but less and worse, which they call *niacocks*. These increase exceedingly, ripen in the beginning of July, and continue until September."—I., 126-'7.

It is known to the curious that this method was substantially adopted by the first planters and continued without material alteration by their successors, until near the close of the last century. It is fair to infer that the practice of *selecting seed corn from stalks which produced more than one ear* was known to the Indians. Mr. J. M. Garnett, who observed it himself, and often urged it on others as a dictate of the principle, that "like will produce like," ascribes its first use in this age to Mr. Joseph Cooper, of New Jersey.

The several points of planting *in squares*, at *four feet* distance, and *hilling* them afterwards; of planting *beans* or *peas* in the same place that their vines might be supported by the stalks, or *pumpkins*, that they might shade the ground and keep it moist, were also religiously imitated by the colonists. But that which was wise in the Indians, with their primitive tools and mode of breaking and tending the ground, should only have been a temporary expedient with the whites, who from the first had better implements. It was proper enough in new land, infested with roots as yet undecayed, to draw a hillock of soil to the growing stalk to supply its increasing demand for nourishment. The distance of four feet admitted the free passage both of the air and the laborers. But the first custom, which in this climate should never have been employed in any land properly drained and capable of being ploughed, was obstinately continued until its absurdity had been demonstrated by reasoning, and its inutility had been shown by the success of many who abandoned it and even adopted an *opposite* method.

Take another account, as of 1648: "Their maize or Virginia corn yields them five hundred for one increase: (it's set as we do garden peas.) It makes good bread and furmenty, will keep seven years, and *malts well for beer*, and ripe in five months, set in April or May."—Perfect Description of Virginia, Hist. Reg., II., 63.

The mode of culture, as described by Beverley, (p. 115,) and by Harris in his "Voyages," (II., 229, Folio Edition of 1764,) is nearly the same with that given by Smith, except that the former makes the distance four or five, and the latter five or six feet apart. Both also speak of stalks bearing several ears.

Smith, the traveler, who was in Virginia in 1773, says, that on the lands near Richmond, "corn was planted at the distance of six feet between each stalk, or squares of six feet, with two, three, and sometimes in strong land four stalks in each hill."—Hist. Reg., VI., 81, 132.

Washington, in 1788, says that this was the usual distance.—(Writings, IX, 323.) The object of this increase was to facilitate the seeding of wheat—a process which, before the advent of the Hessian fly, was commenced in August, the stalks of corn being still standing.

It may be presumed that more than one of the varieties of this grain were known to the natives and the earliest settlers, but of this we find special mention but once. Stith says, that in 1619, "They planted Indian corn upon wheat stubble and had an excellent crop of that. But it must be remembered that *rare-ripe* corn was the corn of these times, and that they usually had *two crops* of it in a year."—(Page 162.)

Beverley, however, who wrote in 1705, recognizes four different kinds; two which ripened early, and two later. The second of the first class may be a small kind which is now known provincially as "pop-corn." The two latter were called severally "flint" and "she" corn; each with incidental varieties of color, but better designated by the size and plumpness of the grain. All of these are still grown here.—(Page 114-'15.)

As it was the chief food of the natives it was natural that the white man should give it a trial, "and whatsoever is said against the Virginia corn, they find it doth better nourish than any provision that is sent thither." Yet was so little of it raised for some years as that the colonists were often straitened in their supplies, and immigration thereby discouraged. Hence the law of Sir Thos. Dale, compelling its culture, to a certain extent. The previous failure arose from an error in their political economy, which is thus noticed by Smith: "The corn by public ordinance being rated at 2s. 6d. the bushel, required such labor it caused most men to neglect it and depend upon trade; whereas, if rated at 10s. the bushel, every man would endeavor to have plenty to sell to the new-comers or any that wanted, and seldom any is transported from England, but it standeth in as much." And

he afterwards assigns this as the true cause of the neglect of this, and the excessive cultivation of tobacco, which had the advantage of being rated at 3s. per pound.—(Smith II., 59, 103.)

From this slight sketch it will appear emphatically true, as alleged by *Arator*, that up to his day "the cultivation of maize remained as it was borrowed from the *aboriginal* farmers of America, except, that if product is the test of science, they must be allowed to have been more accomplished husbandmen than their imitators." And "that a nation which had lived with it and almost upon it for two hundred years, so far from correctly estimating its value, have only learned to *eat* it, but not to avail themselves of half its properties."

[N. F. CABELL, in *De Bow's Review*.]

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—At the twelfth meeting of this association, held during the first week in May at Baltimore, Md., an interesting paper on *The Grape Culture in Missouri* was read by Prof. G. C. Swallow, the State geologist of Missouri. There is (he said) no department of husbandry in which cultivators find so much difficulty and meet with so many failures as in the cultivation of the vine. And yet while some fail, it is equally true that others meet with eminent success. It is quite obvious that the most of those who have failed in their efforts must attribute their failures to the want of an adaptation in their modes of culture to the habits and wants of the vine, as others on the same soils and under the same suns have been most successful. Notwithstanding the true principles of grape culture are so little understood by the community at large, no department of agriculture has been more carefully investigated, more distinctly defined, and reduced to scientific principles. Since Noah planted a vineyard, the vine has followed the progress of husbandry and civilization throughout India, Arabia, Palestine, and southern Europe. It holds an important place in the history of those seats of ancient civilization and progress. The "vine-clad hill" occupied a conspicuous position in every landscape, and the juice of the grape had its place at the social board, and ruled the joys of the banquet hall. While it held so important a position among the nations, its value led the ablest minds to investigate its habits and deduce the best mode of culture from the experience of the many engaged in the pleasant pursuit. Solomon investigated the properties of the vine, and Virgil gave so excellent a treatise upon its habits and culture, that the investigations and experience of the last two thousand years have added but little to the knowledge then possessed.

According to Virgil, (he said,) and there is no better authority, the soil should be warm, light, and dry, and abounding in the alkalies and alkaline earths, the alkalies to consist of potash, soda, and lime. From calcareous soils the vines are more lively and more sought after than that from other soils. He presented an analysis showing the result where the soil contained 34 per cent. of lime, 25 of potash, 11 of soda, and 7 of magnesia, as the proper combination for the successful culture of the vine. In some soils lime would supply the place of potash and soda, and vice versa, but such is not the case in Missouri. A regular temperature is best, but the perfection of the vine in Cabul and Candahar, in India, shows that it will withstand the severest changes of temperature.

He then went on to describe the seven species of native grapes which have been observed in Missouri, and named first the *Vitis Labrusca*, or Fox grape, which in Missouri often grew to ten inches in circumference. On the ridges where the land is poor, the fruit is larger and better than those that grow on the rich alluvial soils. The *Vitis Aestivalis*, or Summer grape, which grows on the rocks and bluffs, are the best grapes in the State. The *Vitis Cordifolia*, or Winter grape, are small and sour. There was also the *Vitis Vulpina*, or Western Muscatine grape, showing that the State procured all the best vines. He next spoke of the cultivation of the vine. The vine dressers had two difficulties to contend with, viz., the rot and the mildew—the first of which was found in the wet lands. The mildew appeared from damp after a hot sun, usually in the month of June. There was no fear of success in the highlands of Northern Missouri. He showed by statistics that at \$1 per gallon the yield would pay a net profit of \$300 per acre, so that in any season the vine grown cannot fall below a profit of \$100 per acre, nor has it been done during the past fourteen years. The natural terraces in Southern Missouri are admirably prepared by nature for the planting of vineyards, and the numerous caves will make excellent wine cellars, as their temperature is sufficiently low and uniform to prevent that acidity to which the wines of all temperate latitudes are predisposed.

NATIONAL FLOWER SHOWS.—The extent to which the love of flowers is carried in England is very plainly shown by the various national flower shows advertised in the public papers. The royal and national tulip shows are to be held this year at Sheffield, on the 27th of May, and a national pansy show on the same day at the same town. The national carnation and picotee society's exhibition is to be held at Moria, and the national rose show at London, on July 1.

AGRICULTURAL OPERATIONS OF THE PATENT OFFICE FOR APRIL.—The spring distribution of seeds having been completed, preparations for the distribution of seeds for sowing in the summer and in the fall have been commenced. Among other orders given is one for two hundred bushels of wheat from Michigan, of a variety which has been planted there for nineteen years, and has never "rusted."

Cuttings of the Zante currant, the "Sultana" and the "Egyptian Ladies' Finger" grapes have been received from Zante, and placed in the "forcing-houses," under the direction of the Commissioner of Patents. The cuttings and roots of the different species of native vines brought from Western Arkansas and Northern Texas by Mr. Williams, (as mentioned in the *Bulletin* for April,) are also at these "forcing-houses," and are thriving finely.

Mr. Townend Glover has been sent to the regions adjacent to the St. John's river in Florida to pursue his investigations concerning the insects injurious and beneficial to agriculture. His instructions (for a copy of which we are indebted to Mr. D. J. Browne) say: "You will please to confine your researches to those insects which frequent the Orange Tree and Cotton Plant, noting their habits, and devising means, if practicable, to destroy them, or ward off their attacks. You will also please to note any accidents or diseases which said trees and plants may exhibit, and ascertain, if possible, the cause, and discover a remedy for prevention or cure. You will keep this office fully informed in relation to your movements and operations by reports sent as often as once in two weeks, unless prevented by sickness or the want of mails. In these reports you will communicate the progress you make in your researches and experiments."

The report for 1857 will make a volume of 560 pages of letter press, and will all be in the hands of the government printer in August.

A COUNTY CROP.—The *Belton* (Texas) *Independent* says: The assessor's statistics shows that there was 5,717 acres sowed in wheat in Bell county, Texas. From present appearances the average will be about 20 bushels to the acre, giving an aggregate of 115,000 bushels.

AMERICAN ARBORETUM.—Dr. Torrey, assayer of the United States Mint at New York, has submitted a proposition to the Secretary of the Interior, for making the proposed enlargement of the Capitol grounds an American Arboretum, where can be found all the forest trees of our country which will grow in this latitude.

NEW YORK STATE AGRICULTURAL COLLEGE.—At a meeting of the Trustees, held at Ovid, on the 4th of May, Gov. King in the chair, the Building Committee submitted a report of their proceedings, stating that an examination had been made upon the farm, and it was ascertained that good materials for the manufacture of brick were to be had upon the farm convenient to the buildings to be erected, and that proposals for their manufacture had been received. Propositions for furnishing stone from quarries at Waterloo and Springport had been received. The Building Committee had solicited estimates from builders for the construction of the centre building and south wing of the college, and presented to the board four propositions and estimates from different parties for its consideration.

After an examination of the several propositions, the board decided that the same being beyond the means under the control of the Trustees, were inadmissible, and the Building Committee were instructed not to accept either of the propositions.

A resolution was adopted that the Building Committee procure one or more plans for the erection of buildings to accommodate at least 100 students, the cost of the same to be within the means of the board. The Building Committee expect to be able to present to the Trustees plans in accordance with the resolution adopted early in June, and should the same be approved, intend to proceed immediately with the erection of the buildings.

THE MICHIGAN AGRICULTURAL COLLEGE, at Lansing, is in successful operation, under the direction of Joseph R. Williams, Esq., its President, aided by an efficient faculty.

THE FARMERS' HIGH SCHOOL, in Centre county, Pennsylvania, will soon be in operation, under the judicious management of Fred'k Watts, Esq., of Carlisle, its worthy President.

THE BIRTHPLACE OF WASHINGTON.—Governor Wise, of Virginia, during a recent visit to the county of Westmoreland, completed the negotiations for the transfer to the State of the birth-spot of Washington, described in the April number of the *Monthly Bulletin*. An acre of ground around the site of the old homestead is to be enclosed with an iron fence, and the family vault is also to be enclosed. Gov. Wise proposes to have the estate purchased by subscription, "and an agricultural school established, that some future son of the Old Dominion may learn to be as successful with the soil and with the scythe, as the great man who left it in his boyhood was in the *field* and in the cabinet."

CONGRESSIONAL LEGISLATION ON AGRICULTURAL MATTERS IN APRIL.—*The Senate* received the Land-distribution Bill below mentioned from the House, and referred it to the Committee on Public Lands, by which it was reported back, without recommendation.

In the House, Mr. Morrill's land bill, donating upwards of six millions of acres to the States, to provide colleges for the benefit of Agriculture and the Mechanic Arts, was passed by a vote of yeas 105 to nays 100. It is proposed to distribute the land on the basis of congressional representation, allowing 20,000 acres for each Senator and Representative in Congress. This will give New York 700,000 acres; Pennsylvania, 540,000; Ohio, 460,000; Virginia, 300,000; Massachusetts and Indiana, 260,000 each; Kentucky and Tennessee, 240,000 each; Illinois, 220,000; North Carolina and Georgia, 200,000 each; Alabama and Missouri, 180,000 each; Maine, Maryland, and South Carolina, 160,000 each; New Jersey and Mississippi, 140,000 each; Connecticut, Louisiana, and Michigan, 120,000 each; New Hampshire, Vermont, and Wisconsin, 100,000 each; Rhode Island, Arkansas, Texas, Iowa, and California, 80,000 each; and Delaware and Florida, 60,000 each. The proceeds of these lands are required to be invested by the various States in safe stocks yielding not less than five per cent. interest, the capital to remain undiminished a perpetual fund, and the interest of which shall be inviolably appropriated, by each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific or classical studies, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life. No portion of the amount can be applied to the purchase, erection, preservation, or repair of any buildings, but solely to the internal economy of the institution; and any State not providing such college within five years from the passage of the bill, forfeits its entire claim to its benefits.

Those who voted in the affirmative on the passage of this bill in the House, were Messrs. Abbott, Adrain, Ahl, Andrews, Bennett, Bingham, Bishop, Blair, Bliss, Bowie, Brayton, Buffinton, Burlingame, Burroughs, Campbell, Case, Chaffee, Ezra Clark, Clawson, Clark B. Cochrane, Colfax, Comins, Corning, Covode, Cragin, Curtis, Damrell, Davis of Maryland, Davis of Massachusetts, Davis of Iowa, Dawes, Dean, Dick, Dodd, Durfee, Edie, Farnsworth, Fenton, Foley, Foster, Giddings, Gilman, Gooch, Goodwin, Granger, Robert B. Hall, Harlan, J. Morrison Harris, Haskin, Hatch, Hoard, Howard, Huyler, Kellogg, Kelsey, Kilgore, Knapp, Leach, Lovejoy, McKibbin, Humphrey Marshall, Maynard, Morgan, Morrill, Edward Joy Morris, Freeman H. Morse, Oliver A. Morse, Murray, Olin, Parker, Pettit, Pike, Pottle, Purviance, Ready, Reilly, Ricaud, Ritchie, Robbins, Roberts, Royce, Russell, Seward, John Sherman, Judson W. Sherman, Sickles, Stanton, Tappan, Thayer, Thompson, Tompkins, Underwood, Wade, Walbridge, Waldron, Walton, Elihu B. Washburne, Israel Washburne, White, Whiteley, Wilson, Wood, Wortendyke, Augustus R. Wright, and Zollicoffer—105.

Those who voted in the negative, were Messrs. Anderson, Atkins, Avery, Barksdale, Billingham, Bocoek, Bonham, Branch, Bryan, Burnett, Caskie, Chapman, John B. Clark, Clay, Clingham, Cobb, John Cochrane, Cockerill, Cox, James Craig, Burton Craige, Crawford, Curry, Davidson, Davis of Indiana, Dewart, Dowdell, Edmundson, Elliott, English, Eustis, Faulkner, Florence, Gartrell, Goode, Greenwood, Gregg, Groesbeck, Grow, Lawrence W. Hall, Thomas L. Harris, Hill, Houston, Hughes, Jackson, Jenkins, Jewett, George W. Jones, J. Glancy Jones, Owen Jones, Keitt, Kelly, Lawrence, Leidy, Leiter, Letcher, Maclay, McQueen, Mason, Miles, Miller, Millson, Montgomery, Moore, Isaac N. Morris, Mott, Niblack, Nichols, Pendleton, Peyton, Phelps, Phillips, Potter, Quitman, Reagan, Ruffin, Sandidge, Savage, Scales, Scott, Searing, Aaron Shaw, Henry M. Shaw, Shorter, Singleton, William Smith, Spinner, Stallworth, Stephens, Stevenson, James A. Stewart, Talbot, George Taylor, Trippe, Ward, Warren, Watkins, Winslow, Woodson, and John V. Wright—100.

THE COMPOSITION OF MILK AT VARIOUS TIMES OF THE DAY.—Professor Boedeker has analyzed the milk of a healthy cow at various times of the day, with the view of determining the changes in the relative amount of its constituents. He found the solids of the evening milk (13 per cent.) exceeding those of the morning's milk (10 per cent.,) while the water contained in the fluid was diminished from 89 per cent. to 36 per cent. The fatty matters gradually increase as the day progresses. In the morning they amount to 2.17 per cent., at noon 2.63 per cent., and in the evening 5.42 per cent. This fact is important, in a practical point of view; for while sixteen ounces of morning's milk will yield nearly half an ounce of butter, about double this quantity can be obtained from the evening's milk. The case is also increased in the evening's milk from 2.24 to 2.70 per cent.; but the albumen is diminished from 0.44 per cent. to 0.31 per cent. Sugar is least abundant at midnight, (4.19 per cent.,) and most plenty at noon, (4.72 per cent.,) The per centage of the salts undergoes almost no change at any time of the day.—*Edinburgh Medical Review*.

AGRICULTURAL PATENTS ISSUED FROM THE UNITED STATES PATENT OFFICE.—For the week ending April 6, each bearing that date—Isaac V. Adair, Varick, N. Y., improvement in corn harvesters.—Harvey Brown, New York, N. Y., improvement in churns.—Daniel G. Coppin, Cincinnati, O., improvement in hand corn planters.—Wm. Field, Providence, R. I., improvement in cotton presses.—Joseph Frey, Battle Creek, Michigan, improvement in seeding machines.—Lewis W. Harris, Waterville, N. Y., improvement in potato diggers.—Isaac B. Lutz, Lafayette, Ind., improvement in seeding machines.—Thos. W. McFarlan, Salem, Ohio, and L. H. Davis, West Chester, Pa., improvement in corn shellers.—Renssaelaer Merrill, Elmira, N. Y., improved fence post.—W. K. Miller, Canton, O., improvement in harvesters.—John R. Moffit, St. Louis, Mo., improvement in threshing machines.—Jesse W. Pelletrean, East Moriches, N. Y., improvement in machine for planting potatoes.—Thomas A. Risher, Circleville, O., improvement in seeding machines.—Benning Rowells, Ossian, N. Y., improved field fence.—James Ross, Midway, Ala., improvement in cotton seed planters.—Thaddeus S. Scoville, Elmira, N. Y., improvement in plows.—Isaac Van Doren, Somerville, N. J., improvement in harvesters.—J. C. Williamson, Washington, Ga., improvement in plows.—Thomas Harding, Springfield, Ohio, assignor to Warder Brokaw and child, of same place, improvement in cutting device for reaping and mowing machines.—Joseph B. Okey, Indianapolis, Ind., assignor to himself and W. Y. Wiley, of Marion county, Ind., improvement in straw cutters.

For the week ending April 13, 1858, each bearing that date—Charles F. Anderson, Charlestown, N. H., improvement in seeding machines.—Charles Beach, Penn Yan, N. Y., improvement in reaping and mowing machines.—Alfred Belchamber, Ripley, Ohio, improvement in chaff screens for winnowing machines.—Thos. E. C. Brinly, Simpsonville, Ky., improvement in plows.—Wm. Crook, New Hope, Pa., improvement in mowing machines.—Augustus B. Davis, Philadelphia, Pa., improvement in corn shellers.—D. W. Entrikin and L. H. Davis, West Chester, Pa., improvement in harvesters.—D. W. Entrikin and L. H. Davis, West Chester, Pa., improvement in cutting device for harvesters.—John Fasig, Jackson, Ohio, improvement in hay knives.—John Harris, Shippensburg, Pa., improvement in seed drills.—Kimball B. Kidder, Burlington, Vt., improvement in bee hives.—John K. Landis, Lancaster, Pa., improvement in straw cutters.—Abraham Marcellus, Amsterdam, N. Y., improvement in track clearers for mowing machines.—Henry Marcellus, Amsterdam, N. Y., improvement in grain and grass harvesters.—John T. Price, Rockville, Ind., improvement in giving adhesion to driving wheels of steam vehicles, ploughs, &c.—E. P. Russell, Manlius, N. Y., improvement in straw cutters.—Thomas Russell, Waldoborough, Me., improvement in seed planters.—Jonathan Haines, Pekin, Ill., improvement in grass harvesters. Patented Sept. 4, 1858.

For the week ending April 20, 1858, each bearing that date—N. E. Allen, Trenton, Wis., improvement in horse hay rakes.—Benedict Gabriel, Elmira, N. Y., improved field fence.—Henry Marcellus, Amsterdam, N. Y., improvement in harvester.—T. S. McWhorter, Smyrna, Del., improvement in potato planters.—Elmon Parker, Baltimore, Md., improvement in corn shellers.—L. S. Robinson, Gypsum, N. Y., improved portable field fence.—Joseph Summers, Raleigh, Va., improved catch latch for farm gates.—Samuel Woodruff, Sparta, N. J., improvement in seed-planting hoes.—John W. Brokaw, Springfield, Ohio, assignor to Warder, Brokaw & Child, of same place, improvement in reaping machines.—George Taylor, Richmond, Ind., assignor to himself and John W. Free, of Laporte, Ind., improvement in corn planters.—James MacNish, Berlin, Wis., improved churn.

For the week ending April 27, 1858, each bearing that date—Thomas D. Burrall, Geneva, N. Y., improvement in mowing machines.—J. T. Donovan and W. J. Fowler, Seguin, Texas, improvement in cotton-seed planters.—R. Dutton, Dayton, Ohio, improvement in harvesters.—John DuBois, Greensboro', Ala., improvement in cotton gins.—George V. Griffith, Sandusky, Ohio, improved raking attachment for harvesters.—Ebenezer E. Lewis, Geneva, N. Y., improved field fence.—Oliver Lippincott, Camden, N. J., improvement in corn planters.—J. B. McCormick, Versailles, Ky., improvement in harvesters.—John Tittle, of Johnstown, Pa., improvement in straw cutters.—W. A. Wood, Hoosic Falls, N. Y., improvement in raking and delivering attachment to harvesters.—*Extension*.—Joseph Eaton, administrator of the estate of Chas. F. Paine, of Winslow, Me., improvement in hay presses. Patented April 25, 1844. Extended for 7 years from and after April 25, 1858.

A VIRGINIA CENTRAL AGRICULTURAL SOCIETY has been organized at Richmond, and James Lyons, of Henrico county, has been elected its President. The committee appointed to draw up the constitution say: "In the performance of their duties, your committee have studiously avoided any interference with the State Society or its Fairs. They are satisfied they but express the feelings of those they represent, in disclaiming any desire to oppose or impair the usefulness of the State Society; nor is there any disposition of unkindness toward our enterprising neighbors, (the citizens of Petersburg,) who have been so fortunate as to induce the executive committee of the State Society to locate its Fair in their midst."

CONVENTION OF AGRICULTURAL EDITORS.—Early in April a circular was issued, and posted at the office of the *American Agriculturist*, New York, proposing a general Convention of the Editors of the several Agricultural, semi-agricultural, and Horticultural Journals throughout the country, for the purposes of social reunion, and the discussion of some of the leading questions connected with Soil culture. This proposition has met with almost universal favor on the part of the press, and the probability is that ere long we shall have an annual gathering of this character which will not only be interesting *per se*, but promotive of a large amount of good to the cause of agricultural improvement. It was at first suggested that a preliminary meeting should be held in June or July, at such place as well as time as might be indicated by general expression; but from the difficulty of mutual consultation among those most interested, owing to their distance from each other, it is now proposed to call a first meeting of Editors during the next session of the *American Pomological Society*, to be held in New York city, beginning September 14th. This would seem to be a feasible plan, as that is to be an important meeting of the Pomological Society, calling together large numbers of Editors as well as others, and these gentlemen can then accomplish two objects in one journey, viz: attend the Pomological meeting, and at the same time meet their brethren of the quill in convention, where an organization can be effected, and arrangements made for a time and place for a future meeting.

“AMERICAN TEA A FAILURE.”—Such is the heading of a paragraph which has recently appeared in almost every newspaper, although it bears no signature or other endorsement. No experiment has as yet been made in this country that will justify such a conclusion.

SMITHSONIAN INSTITUTION.—An analysis is now being made of the samples of guano from Baker's island, obtained by Capt. Davis, U. S. A., by order of the Secretary of the Navy, for this purpose. The result of this analysis will determine the value of this fertiliser.

EXHIBITION AT MOBILE.—The Mobile (Alabama) County Agricultural and Horticultural Society will hold its Fifth Annual Exhibition at Temperance hall and the public square, in the city of Alabama, on the 5th, 6th, and 7th of May, 1858.

NEW YORK STATE AGRICULTURAL SOCIETY.—At a meeting of the Executive Committee, held at Syracuse on the 6th of May, a preamble and resolutions were adopted, expressing the sorrow with which the committee had received tidings of the death of Hon. Archibald McIntyre, and at the same time recording “their very high estimate of the exalted and upright character of the deceased, and the sense of obligation which they entertain for the valuable services rendered by Mr. McIntyre to the New York State Agricultural Society, as one of its earliest Presidents, and as a constant friend of the Society till the day of his death.”

RHODE ISLAND STATE EXHIBITION.—The “Rhode Island Society for the Encouragement of Domestic Industry” will hold a Cattle Show and Industrial Exhibition at Providence, to commence on the 28th of September, and to continue open four days. The State Horticultural Society has relinquished its independent exhibition in order to co-operate, and there is reason to hope that other societies will be moved by like generous impulses. The premium list includes \$784 for stock, \$200 for fruits, \$200 for flowers, \$100 for vegetables, \$150 for gratuities, \$750 for the mechanic arts, \$300 for the fine arts, and \$100 for miscellaneous objects—all judiciously subdivided. It is also proposed to add to the exhibition a Fair, for the “exhibition and sale” of the manufactures of the State.

PENNSYLVANIA STATE SOCIETY.—At a recent session of the executive board, at Harrisburg, David Taggart and A. E. Kapp, of Northumberland, and A. O. Heister, of Harrisburg, are appointed a committee to receive “proposals and make the necessary arrangements for the next annual Exhibition,” and Tuesday, Wednesday, Thursday, and Friday, the 28th, 29th, and 30th of September, and the 1st of October, were fixed as the days of exhibition.

There was a resolution passed offering as a premium a thorough bred Durham bull, not less than eighteen months old, to the County Agricultural Society that shall furnish the largest membership to the State Society, in proportion to the taxable inhabitants in such county, previous to the 15th of September next—a life membership to cost \$10 and an annual membership \$1.

THE PHILADELPHIA SOCIETY FOR PROMOTING AGRICULTURE has offered ten silver medals for the best fields of wheat, rye, oats, corn, potatoes, sugar beets, ruta-bagas, flat or field turnips, carrots, and turnips; for the second best of each of these crops, the Society's diploma. The nature of the soil, the rotation of crops, the tillage, and other expenses of cultivation, as well as the largest yield, to be jointly considered by the judges in making the awards of both the first and second premiums of the Society.

UNITED STATES AGRICULTURAL SOCIETY.—A regular quarterly meeting of the Executive Committee was held at the rooms of the Society, at Washington city, on the 28th, 29th, and 30th days of April. *Present*: President Tilghman, Messrs. Wilson, of Ohio, and McGowan, of Pennsylvania, and the Secretary. Vice President Underwood, of Kentucky, was also present, and participated, by invitation, in the deliberations.

After the minutes of the last meeting had been read. The Secretary announced the death of Col. Moses Newell, of West Newbury, Mass., one of the oldest and most efficient Life Members, and an ex-member of the Executive Committee of the United States Agricultural Society. On motion of Vice President Underwood, seconded by Mr. Wilson, it was

Resolved, That the Executive Committee of the United States Agricultural Society has learned, with deep regret, the decease of Col. Moses Newell, of West Newbury, a valued Life-member, and an ex-officer of the Society. He was a noble specimen of an American Yeoman, who cultivated his paternal acres, and was always ready to devote his time and his talents to the discharge of arduous public duties, which he performed with fidelity and with ability. The broad field of agricultural improvement was, however, the scene of his greatest usefulness, and his matured experience, extensive information, and vigorous intellect gave conviction to his opinion and authority to his example. In this and kindred associations, where his noble character was best understood, and where his usefulness and his virtues were most highly appreciated, his loss, as an associate, a counsellor, and a friend, is painfully felt. The only return which we can make for numerous acts of co-operation, for a faithful performance of official duties, and for a friendly interchange of kind courtesy, is this last sad tribute of our sorrow, and of our sincere sympathy with his bereaved family.

A Protest from T. D. Burrall, complaining of injustice shown him at the Syracuse trial of Harvesters, was read and discussed. On motion of Mr. Wilson, it was—

Resolved, That the Secretary be instructed to write to Mr. Burrall, informing him that his Protest has been placed on file in the Archives of the Society, but that the Government of 1858 does not consider that it has any power to criticise, in any way, the report of a committee appointed by the Government of 1857, which report was accepted by that Government, and published.

Mr. McGowan reported that the dies for the medal of the Society had been received at the United States mint at Philadelphia, and that the medals would be struck and forwarded to Washington in a few days.

The expediency and the practicability of holding an Exhibition in the fall, at one of the cities from which invitations have been received, was fully discussed, and finally the propositions were referred to the President, with power to take such action as he might deem best calculated to promote the advancement of agriculture, and to forward the interests of the Society.

The quarterly report of the Secretary showed that the Rooms of the Society have been open every day,—that the *Monthly Bulletin* has been regularly issued,—that a correspondence has been opened with a large number of State and Local Agricultural Societies,—that steps have been taken to exchange transactions with Societies abroad,—and that donations have been received of books, pamphlets, and agricultural newspapers.

The Committee adjourned to meet again at the rooms of the Society, at Washington, on Friday, the 28th day of May, at seven o'clock, P. M. The Vice Presidents and Honorary Members are respectfully invited to attend.

SECRETARY'S TABLE.—Fears are entertained that some of the *Transactions* for 1857 and the two first numbers of the *Monthly Bulletin* have mis-carried, having been sent by mail under congressional "franks." Members of the Society can be supplied with missing numbers.

The *Reports of the Trial of Harvesters* have all been distributed. The report is embodied in the *Transactions* for 1857, which is sent to Life and Annual Members.

Back volumes for several years can be supplied to new Life Members, but there are no complete sets in possession of the Society.

Periodicals and newspapers sent to the reading-room of the Society should be directed to the "*Monthly Bulletin*, Washington, D. C." The recent establishment of a paper called the *Evening Bulletin*, renders this particular direction necessary.

Donations to the Library have been received during the past month from: New York State Agricultural Society, California State Agricultural Society, Nantucket County Agricultural Society, American Geographical and Statistical Society, Hon. Edward Ruffin of Virginia, Hon. Robert B. Hall of Massachusetts, Hon. Justin S. Morrill of Vermont, E. R. Straznicky of N. Y., J. A. Poor of Maine, Prof. S. W. Johnson of Connecticut, D. J. Browne of the District of Columbia, W. B. Gulick of North Carolina, John McGowan of Pennsylvania, B. B. French of the District of Columbia, and the Editors of the *American Agriculturist*, the *American Farmer*, the *Connecticut Homestead*, the *New England Farmer*, *Goward's Real Estate Register*, the *Ohio Cultivator*, the *New York Observer*, and the *California Farmer*.

Secretaries of Agricultural Societies will confer a favor by sending us the lists of the officers of their Societies for the present year, and the time of holding their Exhibitions.

THIS BULLETIN is published by the United States Agricultural Society for *gratuitous distribution* to its Life Members, and to those Societies with which it is in correspondence.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, JUNE, 1858.

[No. 5.

THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND was suggested in a pamphlet published in 1837 by the late Henry Handley, M. P., a fine specimen of a Lincolnshire squire—a good sportsman, an excellent judge of stock, and cultivating his own estate with more intelligence and success than was usual at that time among his class. The first annual encampment of the Society took place at Oxford in 1839, and its first Journal was published in 1840 under the admirable editorship of the late Philip Pusey, a lively and forcible writer, and a most zealous farmer, who to the day of his death in 1854 devoted his time, his talents, and his fortune to promoting the improvement and recording the progress of his favorite science. He was an example of that delightful combination of scholarship and practical energy which is so common in England, and he exercised the double influence of an accomplished gentleman and an enlightened agriculturist.

In every institution which meets with distinguished success results are always produced which were not anticipated by its originators. Thus it happened that, when the Agricultural Society was founded, not one of the promoters foresaw the importance of the mechanical department. In the ten sections of the charter of incorporation defining the objects of the association, "implements" are only incidentally referred to as one of the subjects to which men of science were to be encouraged to pay attention, in a miscellaneous paragraph, which includes "the construction of farm-buildings, the application of chemistry to the general purposes of agriculture, the destruction of insects injurious to vegetable life, and the eradication of weeds." At Oxford a few manufacturers saw an opening for obtaining customers, and found their way to the show-yard in spite of the difficulties from the want of that cheap conveyance which is now common to the whole kingdom. One gold medal for a collection of implements, three silver medals, and five pounds for a "paddle-plough for raising potatoes," were all the rewards distributed in 1839 for what was destined to be the most attractive, as well as the most useful, feature of the Society's exhibitions. After the Cambridge meeting in 1840 the importance of the implements was acknowledged; and the number displayed, beginning with some 300 at Liverpool in 1841, increased at the rate of about 100 on every succeeding year, until in 1853, at Gloucester, they reached their highest point in a total of 2,000. The rise or fall of a few hundreds chiefly depends upon the importance and railway facilities of the town where the show is held, and the number of articles exhibited is less a test of the progress of mechanical invention than of the sales which are likely to be effected in any particular district. The annual show is only one of the numerous modes in which the makers advertise and display their productions. The true prize to the manufacturer is plenty of custom.

For several years past all the English railway companies have agreed to convey live stock free, and implements at half their usual charges, to and from the shows of the Royal Agricultural Society, the railway company at the towns where they are held generally providing accommodation for the mechanical compartment. This at Chelmsford cost the Eastern Counties road upwards of \$15,000. Railway fares and pace could alone bring the number of shilling-paying strangers who contribute to the enormous expense of these exhibitions. The population of the city of Salisbury, including men, women, and children, only amounts to 10,000, but the visitors to the show-yard in 1857 were over 35,000. This is of itself a striking proof of the wide and eager practical interest which is felt in agriculture, for there is little to gratify the eye of mere holiday gazers; and when in addition we consider the mountains of coal, iron, timber, artificial manure, lime, and chalk, conveyed in the one direction, and the quantity of live stock and corn in the other, we cannot help coming to the conclusion that the locomotive has been the great cultivator of the farmer's mind and the farmer's land—the great agent for the extraordinary advance which British agriculture has achieved in the last quarter of a century.

The Royal Agricultural Society, with its council of peers, squires, tenants, and implement-makers—its professors of chemistry, botany, and veterinary art—its thousands of subscribers, spread over every county of England—its Journal of transactions and reports—and, above all, its annual encampments in the centres of successive districts—has done for farm-

ing what the great fairs of the middle ages did for commerce--concentrated and diffused knowledge, brought customers and producers into contact, and helped to extinguish prejudices in the excitement of social gatherings. They have carried to provincial cities the best live stock, the best implements, and the best cultivators. The influence of example, of competition, and even of rank and fashion, has been brought to bear on local obstinacy. Squires have been encouraged to improve their estates by the speeches of even greater men than themselves, and young noblemen, in want of an object, have found it in agricultural duties. Implement-makers have had the advantage of the suggestions of their customers, and, thus taught and teaching at the same time, have every year become more dependent on tenant and less on fancy farmers. Men who went to Shows stanch champions of the flail have been vanquished by the mere sight of a steam-engine driving barn-machinery; as an old Homeric Greek, if he could revisit earth, would instantly recognise the inferiority of stones hurled by the hand to the iron balls projected from the cannon's mouth. The greatest landlords, wandering unknown in the show-yards, have had opportunities of learning wholesome truths from the tenants of other landlords. Self-satisfied ignorance is abashed, and triumphant skill finds at once a large and eager audience. These agricultural exhibitions are, in fact, the Woburn and Holkham sheep-shearings, made national and expanded to the dimensions of an age of steam-driven threshing-machines. When the Royal Society started into life there were about four hundred local societies in existence, but they were rather associations for the promotion of eating and drinking than for the promotion of the arts by which the materials for eating and drinking are increased. The speeches were usually complimentary, and the members congratulated one another upon the pre-eminence to which their own enlightened district had attained. They were, in a word, societies for maintaining local darkness instead of for the acquisition of fresh light from enlarged experience.—[*London Quarterly Review.*]

THE EVIL RESULTS OF OVERFEEDING CATTLE.—This is the title of a pamphlet recently published in London, written by Mr. F. J. Gant, Surgeon and Pathologist to the Royal Free Hospital, to show that the fat of animals, when produced in excess, is a disease. Mr. Gant, upon going one day to inspect the prize cattle at the London exhibition, and upon considering their enormous size and weight, attained in so short a period of growth, had at once strong misgivings upon the subject; he “naturally indulged in a physiological reflection on the high-pressure work against time which certain vital internal organs, as the stomach, loins, heart, and lungs, must have undergone at a very early age;” and he afterwards followed up the most remarkable of these puffed-up, panting creatures to the slaughter-house, where he obtained possession of their internal organs and portions of their muscular fibre for anatomical examination. The result was to prove that disease, in almost every case, had been brought on by over-feeding; that of most frequent occurrence being the conversion of the heart into fat, so as materially to impede its functions, having lost its contractile and propelling power. Disease of the lungs followed in many cases as a matter of course, and even the intestines were sometimes found loaded with a fatty-like mass, consisting “apparently of scrofulous matter.” To sum up a very important statement, he tells us—

“We should therefore expect in vain to replenish our own muscles by the use of such food, nor should animals thus overfed be regarded as prize specimens of rearing and feeding. The heart, being converted into fat, no longer retains its contractile power, but beats feebly and irregularly. The blood, therefore, now moves onward in a slow and feeble current. Hence the panting breathlessness due to stagnation of blood in the lungs, which the heart labors (in vain) to remove, while the skin and extremities are cold. Hence the stupid, heavy-headed expression of a congested brain, and the *blood-stained* appearance of meat after death. The slightest exertion to an animal under such circumstances might suddenly prove fatal. Were a man in this condition to present himself at an insurance-office it would refuse to insure his life at any premium. Yet, under similar circumstances, a sheep is awarded gold and silver medals, and its feeder a prize of £20!

SALES OF SHORT-HORNED CATTLE.—The fourth annual sale of short-horn cattle at Woodbern Farm, by R. A. Alexander, esq., took place on the 2nd of June. Forty-eight head, the most of them young cattle, were sold for the aggregate sum of \$11,755. John R. Bryan, esq., of Kentucky, paid \$565 for Naman, a two year old bull, and Samuel Thorne, esq., of New York, paid \$500 for Fenella, an imported cow. The prices ranged from these down to \$95 for a ten months' old bull calf, and \$90 for a nine months' old heifer calf.

CASHMERE GOATS IN OHIO.—We learn from the *Scioto Gazette* that the flock of Cashmere or Angora goats sent to that county by Hon. John P. Brown, of Constantinople, have been increased by the addition of four kids, which were dropped this spring. All the flock are doing well so far.

NEW YORK STATE AGRICULTURAL COLLEGE.—The Trustees have adopted a plan of a college building, a portion of which will be erected and enclosed before the first day of December next, and finished ready for occupancy before the first of April, 1859. The college farm consists of 686 acres, 500 of it under cultivation and in fine condition for farming, being free from stumps and roots; it is bounded on the west by Seneca lake, and on the east by the corporate limit of Orid. This village is beautifully situated on the summit between the Seneca and Cayuga lakes, on the stage-road, 20 miles from Seneca and 26 miles from Ithaca.

“The college farm rises from the west to the east line 530 feet, a gradual rise, an inclined plain, with a great variety of soil. It is doubtful whether there could be found in the State a farm better adapted for the purposes of an experimental farm. On this farm there is low land and high, medium, and land receiving the lake breezes, protected from the frost by the lake; and high land to receive the eastern as well as the western sun. The great variety of soil, the varied altitude of the farm, gives a fine opportunity of having experimental fields, of the various altitudes, which will exhibit lots to compare with lots upon any farmer's farm high or low, as a clue to the best method of farming in his various fields. And this is as it should be, as this farm is for the benefit, and hoped to be for the instruction alike of all the farmers of the State who visit it, as tens of thousands will.

“The farm is $2\frac{1}{2}$ miles long, from east to west, and half to five-eighths of a mile wide, just the shape for a State farm; and when the avenue is laid out, east and west, through the farm, and made a pattern or model road, the lots north and south all to join this avenue, the buildings of all descriptions for the use of the farm to be erected on this avenue, it will be seen at once that all the teaming for the whole farm would be upon this road, and that every lot on the farm would be easy of access and convenient to the farm buildings.

“An all important article—water—will be had in every lot or field on the whole farm, and there is an abundance of water, and where it should be, to irrigate every lot on the farm.”

THE MASSACHUSETTS SCHOOL OF AGRICULTURE, of which Hon. Marshall P. Wilder is President, has made an appeal for funds. “The trustees will not attempt to provide any establishment, or make any expenditures, until sufficient means are obtained to purchase suitable land, and provide everything requisite to carry on a farm, garden, and school, in the way best calculated to fulfil the purposes of the act of incorporation.” The Trustees are M. P. Wilder, B. V. French, G. W. Lyman, R. S. Fay, S. Hooper, J. S. Cabot, and C. O. Whittemore.

THE ROYAL AGRICULTURAL SOCIETY of England held its annual general meeting on Saturday, the 22d of May, at its rooms, No. 12 Hanover square, London. The Duke of Marlborough was unanimously elected President. The report, after stating the arrangements for the forthcoming exhibition at Chester, announced that the exhibition for 1859 would be held at Warwick, and that, if circumstances were favorable, an exhibition would be held at London after 1860.

COTTON AND WOOL.—Mr. H. Ashworth read an elaborate paper at a recent meeting of the British Society of Arts, in which he said: “It must be well known that our manufacturing industry is not sustained upon British products alone,—that its first element, raw material, in every branch, is chiefly supplied from abroad. The returns have shown that that manufacture, which, more than any other, contributes to our national commerce, is cotton; an article which is indispensable to sustain the existence of that large fabric of property and industry which is essentially its own, and almost in an equal degree to that of its kindred manufacture—wool.”

BRAY'S TRACTION ENGINE.—The “Illustrated London News” of May 29th, contains an engraving of an improved Traction engine, invented by Mr. Bray, of Folkestone, which is said to possess advantages over all others now in use for its simplicity and utility. The wheels of traction-engines adapted for ploughing have not had sufficient hold upon the ground when constructed in the ordinary manner. By Mr. Bray's improvement, the driving-wheels are constructed with teeth or blades, which enter the ground, and obtain a firm hold. The teeth are made to slide or move in and out by an eccentric motion, so that they clean themselves of the soil and are again ready to enter the ground, the smooth surface of the wheels being also cleaned by scrapers. The eccentric is capable of adjustment, so that the projection of the teeth may be varied, and thus the wheels may at pleasure be made to act like ordinary wheels, and thus run on highways. With one of these engines of eight-horse power, weighing six tons, six acres of a light, loamy soil, (rather wet,) were ploughed by a frame of three ploughs in ten hours. The fuel cost one English shilling an hour, and it required two men to steer and to manage the engine, and one ploughman. A load of ten tons was drawn up Dover hill, a gradient varying from 1 in 7 to 1 in 11, and brought down again with equal ease.

CONGRESSIONAL LEGISLATION UPON AGRICULTURAL MATTERS.—*The Senate* took no action upon the "Morrill Land Bill," which had been passed in the House of Representatives. Senator Stuart, from the Committee on Public Lands, asked that the committee be discharged from the further consideration of a bill to enable the Columbian College, in the District of Columbia, to found and establish a professorship of agriculture and mechanical science.

The House Committee of Ways and Means recommended an appropriation of \$60,000 "for the collection of agricultural statistics, investigations for promoting agriculture and rural economy, and the procurement and distribution of cuttings and seeds." This appropriation, after a warm debate, was carried. The Senate, when it reached that body, decided after debate to reduce it to \$20,000. The House adhered to the sum which it had originally voted, and that sum (\$60,000) was finally agreed to by a committee of conference.

Motions to print the Report of the Commissioner of Patents, on agriculture, were referred to the Committees on Printing, and in accordance with their recommendations, the Senate ordered 31,420 copies, (of which 5,000 are for the Patent Office,) and the House 211,530 copies, (of which 10,000 are for the Patent Office,) making 242,950 copies in all: "Provided, that the aggregate number of pages contained in said report shall not exceed five hundred and sixty-eight, including ten pages of illustrations on wood: And provided further, That the entire amount of copy necessary to complete said report, be placed in the hands of the Superintendent of Public Printing on or before the 31st day of August next." A sketch of the contents of this Report will be found on another page of this Bulletin. A desire to economise the expense of publication led the Committees on Engraving to reject a portrait of an English dray-horse, which it was proposed to have printed in colors, at a cost of 4 cents per copy.

The Chairman of the House Committee on Agriculture addressed a letter to the Commissioner of Patents, requesting information on the management of the Agricultural Bureau. Commissioner Holt replied at length, reviewing criticisms which have been made by agricultural periodicals and societies. It has been stated that persons have been sent out to Europe annually, at the public expense, to gather seeds; that the seeds gathered, in many instances, were such as are already in successful cultivation, and that, when procured, they have not been properly distributed, with a view to the climate and soil adapted to their growth. Commissioner Holt, in answer to these charges, says that persons have not been sent out annually by the Patent Office. The only instances in which expenses have been incurred in this manner were in 1854-'55, when Mr. Browne was sent to Europe, for the purpose of obtaining information on agricultural subjects, and for making arrangements to procure in future seeds, cuttings, &c., from the most reliable sources, and upon the most advantageous terms, not only in Britain, but on the continent, as well as from other parts of the globe. In 1857 Mr. Claiborne was sent to collect and report information in relation to the consumption of cotton. The collections of seeds, cuttings, &c., were made with discrimination, and with reference to their adaptation to our wants and economy. Large portions of these selections have been successfully cultivated in various parts of the United States, increasing the products of the farms and gardens, and enhancing the comforts, luxuries, and wealth of the people. In consequence of this, a new field of enterprise has been created, more than two hundred seed-stores established in the interior, and the demands for approved seeds of various kinds, foreign and domestic, have been fully doubled within the last four years. The Commissioner thinks that these seeds, &c., should be distributed, when practicable, throughout the country in larger quantities than has been the case heretofore, and to competent and responsible parties, such as agricultural societies, county clerks, seed growers, nurserymen, &c., the most appropriate agencies, he conceives, for the execution of the implied trust. Commissioner Holt pays a high tribute to the scientific attainments of Mr. Browne, and gives a sketch of that gentleman's life, to show that his knowledge of agriculture is the result of actual experience on farms or plantations. It is shown that Mr. Browne has gained his information as a scientific explorer in nearly all parts of the world, as a railway and canal engineer, as a chemist working in his laboratory, as an author in his study, and as an editor in his sanctum, ever having at heart the advancement of American Agriculture.

THE SIXTH ANNUAL Exhibition of the United States Agricultural Society will be held at Richmond, Virginia, by invitation from and in connexion with the Virginia Central Agricultural Society. This number of the *Bulletin* has been kept back in the hope of giving in it the premium list, which will be on a liberal scale, but it will be impossible to have it perfected until the July number. The grounds are beautifully located on the outskirts of the city, and there is every reason to anticipate a large and interesting exhibition. The facilities for reaching Richmond, by land or by water, from all sections of the Union, are unsurpassed, and the citizens are zealously co-operating with the officers of the Exhibition. Exhibitors of Agricultural Machinery and Implements are requested to make early application for space and for steam-power, if desired.

AGRICULTURAL OPERATIONS OF THE PATENT OFFICE.—The Report for 1857, (which will be ready for distribution before the re-assembling of Congress,) will be a valuable work. It will contain original articles on: The Progress and Public encouragement of Agriculture in Russia, Prussia, and the United States, giving the history, progress, and objects of the Agricultural Schools and Societies of these countries respectively, with the amount of moneys appropriated for their support and for other agricultural purposes;—On the English Dray Horse;—On Asiatic Goats, by R. Peters, esq., of Georgia;—On the adaptation of the mountain regions of the South to Sheep Husbandry, by Geo. C. Patterson, of Tennessee;—On the history, geographical distribution, organization, food, and habits of the Llama and Alpaca, and their probable adaptation to certain regions of the United States;—On the quadrupeds of Illinois, by Robert Kennicut, of Illinois;—On the habits of the Honey Bee, illustrated by engravings made from photograph of the interior of the hive;—Investigations on the insects and diseases affecting the Cotton Plant, by Townend Glover;—History, Commerce, Sources, Manufacture, and Economical Value of Salt consumed in and exported from the United States; by William C. Denis, of Florida;—Researches on Indian Corn;—Investigation of the sugar-bearing capacity of the Chinese sugar-cane, by Prof. J. Lawrence Smith, of Kentucky;—Chemical Researches on the Chinese and African sugar-canes, by Dr. Charles T. Jackson, of Massachusetts;—On the practicability of the Tea Culture in the United States;—On the culture and packing of Northern Fruits for the English market;—Monograph of American grape-vines, by Major John Le Conte, of Pennsylvania;—Grape Culture in Missouri, by Prof. G. C. Swallow, of Missouri;—Cotton Manufactures of the United States;—On the Statistics of the consumption of cotton in Europe, by John Claiborne, of Tennessee;—Early Agricultural History of Illinois, by John Reynolds;—A paper on the comparative area of the forest and prairie lands of the United States, with a view of showing the influence of the forests on the increase or diminution of the annual amount of rain and snow, which may fall on those tracts or the regions adjacent, by Prof. Joseph Henry, of the Smithsonian Institution;—Meteorological tables of some hundred localities, showing the mean monthly and annual temperature, with extremes of heat and cold, the amount of rain in inches, the latest spring and earliest autumnal frosts, for the year 1857;—Commercial Statistics, &c.

A circular letter has been sent from the Agricultural Bureau of the Patent Office to our Diplomatic and Commercial agents, missionaries, officers of the navy, and other public functionaries who may be residing or travelling abroad, requesting agricultural and horticultural information. Commissioner Holt says:—"You are probably aware that, for several years past, Congress has appropriated considerable sums for the collection of agricultural statistics, investigations for promoting agriculture and rural economy, and for the procurement and distribution of cuttings and seeds, which sums have been expended under the direction of this office. Premising that you may possess facilities to aid in the advancement of these objects, the undersigned begs leave to ask of you to obtain and forward to this office, through the Department of State, or otherwise, as far as may be found practicable or expedient, *free of charge*, a list or catalogue of the botanic or local names of the principal cereals, grasses, legumes, garden vegetables, tubers, bulbs, flowers, fruits, nut-trees, or of other economical plants, growing in the countries you may visit, with brief descriptions, either written or printed in English or in other languages, of their properties and uses, modes of culture, periods of sowing and harvesting, the character of the soil and its elevation above the sea, the mean, maximum, and minimum of the thermometer, and the amount of rain, in inches, each month of the year, together with the periods of the latest spring and earliest autumnal frosts." For this purpose proper blanks are sent with the circular.

A distribution of ten varieties of Turnip seed has been made, each lot accompanied with a circular, soliciting information as to the growth and yield of each variety. A distribution has also been made, for experiment, of Tuscan wheat, which a number of the most respectable farmers of Berrien county, Michigan, certify to as having been introduced into that region several years back by Mr. William Dougherty, and they declare that they "have never known or heard of its being injured by the Hessian fly, or any other insect, it also being very valuable in every other particular."

Dr. Charles T. Jackson's process of making syrup and sugar from the Chinese sugar-cane, (taken from the Agricultural Report for 1857,) has been printed on a letter-sheet and extensively distributed.

Mr. Townend Glover is now in Florida, prosecuting his entomological researches. Maj. Williams will soon leave for Texas and New Mexico, to collect the native grape vines of those localities. Dr. Torrey is making a collection and preparing a report on the grasses and Hedge Plants of the United States. Steps are being taken for the preparation and the publication of a series of physical, industrial, and statistical maps, indicating the mean annual summer and winter temperatures of the United States reduced to sea level. One of these maps, prepared at the Smithsonian Institution, is now on exhibition at the Agricultural Bureau of the Patent Office, and is very interesting.

AGRICULTURAL PATENTS ISSUED FROM THE UNITED STATES PATENT OFFICE.—For the week ending May 4, 1858, each bearing that date—Francis and Lodowick Burdick, South East, N. Y., improvement in machine for hulling rice.—James Charlton, Alleghany, Pa., improvement in seed planters.—R. H. Fisher, Claremont, N. H., improvement in harvesters.—James J. Johnston, Alleghany, Pa., improvement in seed planters.—James F. Kierstead, La Porte, Ind., improvement in seeding machines.—Chas. N. Lewis, Seneca Falls, N. Y., improved corn husker.—Henry Marcellus, Amsterdam, N. Y., improvement in mowing machines.—Lewis Miller, Canton, Ohio, assignor to C. Aultman & Co., of same place, improvement in harvesters.—Chas. Crook, New Hope, Pa., improvement in harvesters. Patented May 5, 1857.

For the week ending May 11, 1858, each bearing that date—George W. Atkins, Milton, Del., improvement in self-regulating grain measure.—C. B. Brown, Alton, Ill., improvement in harvesters.—Robert J. Clay, St. Louis, Mo., improvement in corn planters.—Jonas C. Conkey, Washington, O., improvement in harrows.—John De Rush, St. Mary's, O., improvement in grain cleaning machines.—Edward P. French, Nashua, N. H., improvement in bee hives.—L. W. Kelley, Brunswick, O., improvement in cultivators.—Charles Leavitt, Cleveland, O., improvement in corn mills.—L. J., Wm. S., and Cyrus H. McCormick, Chicago, Ill., improvement in reaping and mowing machines.—George Nolman, Deerfield, O., improved binding device for harvesters.—Enoch Osgood, Boston, Mass., improvement in cotton gins.—Michael Stevens, Lucas, O., improvement in cider mills.—Oren Stoddard, Busti, N. Y., improvement in harvesters.—Daniel C. Smith, Tecumseh, Mich., improvement in corn huskers.—Solomon P. Smith, Crescent, N. Y., improvement in straw cutters.—Henry C. Smith, Cleveland, O., improvement in harvesters.—John S. Troxel, Mount Pleasant, Pa., improvement in harvesters.—Chas. E. and Joseph N. Gladding, Troy, Pa., assignor to Chas. E. Gladding, aforesaid, improvement in forks for elevating hay.—Lewis Miller, Canton, O., assignor to C. Aultman & Co., of the same place, improved finger or guard for guard harvesters.—B. Kuhns, Dayton, O., and M. J. Haines, Delaware City, Del., improvement in seed planters. Patented September 30, 1856.—Charles W. Cahoon, Portland, Me., assignor to J. B. Cahoon and D. H. Furbish, of same place, improvement in seeding machines. Patented Sept. 11, 1857.—Ipsachar Frost and James Monroe, Albion, Mich., assignors to Henry A. Burr, Israel D. Condit, Alexander Swift, Daniel Barnum, and John M. Carr, New York, N. Y., improvement in machinery for separating flour from bran. Patented February 27, 1849. Re-issued March 13, 1855.

For the week ending May 18, 1858, each bearing that date—W. F. C. Beattie, Cornwall, N. Y., improved method of opening and closing farm gates.—John C. Birdsell, Rush, N. Y., improvement in machinery for hulling and threshing clover.—J. W. Bookaw, Springfield, Ohio, assignor to Warder, Brokaw & Child, of same place, improvement in reaping and mowing machines.—Joseph Cawthra, Rochester, N. Y., improvement in corn huskers.—John Endsley and Elihu Fletcher, Abington, Ind., improvement in cultivators.—Ray Green, Cusawago, Pa., improvement in corn shellers.—John M. Hall, Warrenton, Ga., improvement in plows.—Martin Hallenbeck, Albany, N. Y., improvement in harvesters.—Charles Howell, Cleveland, Ohio, improvement in reaping and mowing machines.—Henry Meyer, Bridgeton, N. J., improvement in mill for treating Chinese sugar cane.—H. and J. S. B. Norton, Farmington, Me., improved device for slicing apples.—L. B. Phelps, Geneva, Ohio, improvement in corn planters.—Abner Reeder, Wrightstown, Pa., improvement in apparatus for cleaning the coulters of plows.—Luther Robinson, Melrose, Mass., improvement in seeding machines.—S. Vascow and A. Guirand, Cincinnati, O., improvement in grinding mills.—P. C. Ingersoll, Green Point, N. Y., assignor to himself and H. F. Dougherty, of the same place, improvement for securing metallic bands on cotton bales.—Warren S. Bartle, Newark, N. J., assignor to Lyman Bickford and Henry Hoffman, Macedon, N. Y., improved machine for sowing fertilizers. Patented April 22, 1858.

For the week ending May 25, 1858, each bearing that date—George W. Barnett, Springfield, Ohio, improvement in driving wheels for portable steam engines and agricultural implements, &c.—Vosco M. Chafee, Grayville, Ill., improvement in harrows.—James M. Clark, Lancaster, Pa., improvement in hominy mills.—Edwin Clark, Lancaster, Pa., improvement in flouring mills. Ante-dated February 2, 1858.—I. H. Conklin, Rockford, Ill., improvement in harvesters.—Jesse Trye, Mendota, Ill., improvement in gang plows. Ante-dated March 18, 1858.—Jacob Hibbard, Weathersfield, N. Y., improvement in cheese presses.—T. A. Hollman, Beardstown, Ill., improvements in the manufacture of dextrine and sugar.—Henry Lowe, Baltimore, Md., improvement in preparing paper pulp from reeds.—Joseph McCammon, Dayton, Ohio, improved seeding machines.—G. M. L. McMillen, Dayton, Ohio, improvement in seeding machines.—B. B. Meacham, Ridleyville, Fla., improvement in corn huskers.—Oren Moses, Malone, N. Y., improvement in straw cutters.—A. M. Pratt, Lowell, N. Y., improvement in seeding machines.—Christopher Rands, Peoria, Ill., improvement in flouring mill.—John C. Stevens, Lee, Mass., improvement in seed drills.—J. A. St. John, Janesville, Wis., improvement in raking attachment to harvesters.—William H. Seymour and Henry Pease, of Brockport, N. Y., assignors to Wm. H. Seymour and Dayton S. Morgan,

of same place, improvement in harvesters. *Re-issues*.—Henry Green, Ottawa, Ill., improvement in cutting device for harvesters. Patented March 21, 1854. Ante-dated September 21, 1853. Henry Green, Ottawa, Ill., improvement in mowing machines. Patented March 21, 1854. Ante-dated September 21, 1853.—Henry Green, Ottawa, Ill., improvement in reel supports in mowing machines. Patented March 21, 1854. Ante-dated September 21, 1853.—Henry Green, Ottawa, Ill., improvement in cutting device for harvesters. Patented March 21, 1854. Ante-dated September 21, 1853.

THE UNITED STATES AGRICULTURAL SOCIETY was founded in June, 1852, by a national Agricultural Convention, (called by the direction of twelve State Agricultural Associations,) at which there were present one hundred and fifty-two delegates, representing twenty-three States and Territories. It has since been in active operation, receiving the confidence, patronage, and favor of American agriculturists, and co-operating with State and Local Associations. If it has not accomplished all which its founders anticipated, or which its present officers desire, it has furnished pleasing evidence of its growing prosperity and usefulness, as will be seen by the following brief summing-up of its operations.

Annual Meetings.—Six of these have been held at Washington city, and they constitute in reality the "Board of Agriculture," recommended by the Farmer of Mount Vernon. Gentlemen from almost every State in the Union, (many of them delegates from Agricultural Associations,) have annually assembled to discuss such topics as have been presented, calculated to advance the cause of agricultural improvement;—interesting and valuable lectures have been delivered by practical and scientific farmers;—reports have been submitted by committees specially appointed to examine new inventions and theories, and by delegates who have been accredited to the agriculturalists of other land;—and there has been a general interchange of opinion. "The great practical truth and characteristic of the present generation, [said the Farmer of Marshfield,] is, that public improvements are brought about by voluntary association and combination. The principle of association—the practice of bringing men together for the same general object, pursuing the same general end, and uniting their intellectual and physical efforts to that purpose, is a great improvement in our age. And the reason is obvious. Here men meet together that they may converse with one another—that they may compare with each other their experience, and thus keep up a constant communication. In this practical point of view, these Agricultural Associations are of great importance. Conversation, intercourse with other minds, is the general source of most of our knowledge. Books do something. But it is conversation—it is the meeting of men face to face, and talking over what they have in common interest—it is this intercourse that makes men sharp, intelligent, ready to communicate to others, and ready to receive instruction from them."

Annual Exhibitions.—These have been held at Springfield, Mass.; Springfield, Ohio; Boston, Mass.; Philadelphia, Pa.; and Louisville, Ky., each exhibition distinguished by some national feature. They have been self-sustaining, the receipts meeting the disbursements of upwards of one hundred thousand dollars for premiums and expenses; and they have not only increased the efficiency of State and Local Associations, but have called together larger assemblages of people than have ever been convened upon other occasions, embracing not only our most intelligent yeomanry, but gentlemen of every art and profession from every portion of the wide-spread Union, evincing that the national pulse beats in unison with our own, and that the public voice is responsive to the call. At the banquets with which these national jubilees have been concluded, eminent gentlemen have met upon the broad platform of good citizenship, merging all sectional jealousies and party distinctions in a general desire to improve and to elevate that great calling which gives independence and strength to our nation.

A *Secretary's Office, Library and Reading Room*, has been established at No. 356 Pennsylvania avenue, Washington City, where the members of the Society, and others interested in agricultural improvement meet as brothers at a common home, and find a collection of objects in which they have a common interest. Many State and County societies have contributed their published transactions, premium-lists, the names of their officers, and other information, which has been duly registered, and they have received the *Monthly Bulletin* of the Society in return. A majority of the agricultural and numerous other publishers have contributed their periodicals and newspapers, and thus aided in forming a Free Agricultural Library at the National Metropolis. The services of the Secretary (Ben: Perley Poore) have been tendered to all agricultural organizations and publications wishing information at the seat of government.

Published Transactions.—Six large annual volumes have been published, containing much useful and important matter. As they will in future be relieved from publishing the reports of the annual meetings and exhibitions, there will be more space for elaborate articles from the pens of distinguished practical and scientific agriculturalists on subjects previously assigned, for which premiums will be offered.

The Monthly Bulletin contains eight large and closely printed pages, containing reports of the annual meetings, exhibitions, and operations of the Society, with a general statement of the position of agricultural affairs at the metropolis, (including such information as is furnished by the Agricultural Bureau and by the Examiner of Implements in the Patent office,) and reports of the operations of State Boards and Societies, Agricultural Colleges, and of all Legislative recognition of the predominant interest of the country. The Secretary of the Society, charged with its editorship, will endeavor to make it a valuable *compilation of geonomic facts*, interesting to the agriculturalists of the United States, and an acceptable visitor at every rural home.

The United States Agricultural Society, having thus endeavored to awaken an extended and general interest in the great cause which it was founded to advance,—having promoted a more cordial intercourse and a closer alliance between cultivators, and the various State and Local Agricultural Societies, invites all good citizens who may wish to extend its usefulness to enrol themselves in its ranks. Entirely dependent upon the public for support, it confidently appeals for co-operation and pecuniary aid to those who appreciate agriculture.

Life Members receive an elegant Diploma, the annual volume of Transactions, the Monthly Bulletin, free tickets of admission to all Exhibitions, and their share of such seeds and cuttings as may be procured for distribution, without any additional assessment or payment beyond the admission fee of ten dollars. *Annual members* receive the annual volume of Transactions and the Monthly Bulletin, paying a fee of two dollars. County or town societies have the privilege of making their President, Secretary, or Treasurer a Life Member, in which case the Society will receive the publications, &c. Remittances for membership can be made by mail, to Hon. B. B. French, Treasurer U. S. Agricultural Society, Washington, D. C. All correspondence must be addressed to the Secretary, Ben: Perley Poore, Washington, D. C.


OFFICERS FOR 1858.

President.—Gen. TENCH TILGHMAN, of Maryland.

Vice Presidents.—J. D. Lang, of Maine, H. F. French, of New Hampshire, Fred. Holbrook, of Vermont, John Brooks, of Massachusetts, B. B. Thurston, of Rhode Island, S. H. Huntington, of Connecticut, B. P. Johnston, of New York, W. P. Robeson, of New Jersey, David Landreth, of Pennsylvania, John Jones, of Delaware, Odin Bowie, of Maryland, Philip St. George Cocke, of Virginia, H. K. Burgwyn, of North Carolina, F. W. Alston, of South Carolina, Richard Peters, of Georgia, C. C. Clay, jr., of Alabama, M. W. Phillips, of Mississippi, J. D. B. DeBow, of Louisiana, Lucien Butts, of Ohio, W. L. Underwood, of Kentucky, T. Fanning, of Tennessee, D. P. Holloway, of Indiana, B. F. Edgerton, of Wisconsin, H. C. Johns, of Illinois, J. R. Barrett, of Missouri, Michael Shoemaker, of Michigan, D. L. Yulee, of Florida, Guy Bryant, of Texas, LeGrand Byington, of Iowa, A. P. Bradford, of California, W. W. Corcoran, of the District of Columbia, Manuel H. Otero, of New Mexico, H. M. Rice, of Minnesota, J. H. Lane, of Oregon, D. Anderson, of Washington Territory, John M. Bernhisel, of Utah, B. B. Chapman, of Nebraska, F. M. Arney, of Kansas.

Executive Committee.—Henry Wager, of New York, J. McGowan, of Pennsylvania, Josiah Ware, of Virginia, Frederick Smyth, of New Hampshire, Henry Wilson, of Ohio, John Merryman, of Maryland, James W. Brown, of Illinois.

Treasurer.—B. B. French, of the District of Columbia, }
Secretary.—Ben. Perley Poore, of Massachusetts, } Offices at Washington, D. C.

 *Sixth Annual Fair* at Richmond, Va., by invitation of the Virginia Central Agricultural Society, October 25, 26, 27, 28, 29, and 30. Premium List in the *Bulletin* for July.

FAIRS FOR 1858.—An attempt will be made to publish, in the *Bulletin* for August, a complete list of all State and County Fairs for 1858. Many Secretaries have already furnished us with the dates of their respective fairs, and it is to be hoped that the list can be made perfect. Meanwhile we give a list of such State Fairs as we have received the programmes of:

<i>States.</i>	<i>Places.</i>	<i>Secretaries.</i>	<i>Time.</i>
Alabama,	Montgomery,	N. B. Cloud,	Oct. 18, 19, 20, 21, 22
California,	Marysville,	Rev. O. C. Wheeler,	Aug. 23, 24, 25, 26, 27
Connecticut,	Hartford,	Henry A. Dyer,	Oct. 12, 13, 14, 15
Illinois,	Centralia,	S. Francis,	Sept. 14, 15, 16, 17, 18
Indiana,	Indianapolis,	John B. Dillon,	Oct. 4, 5, 6, 7, 8
Iowa,	Oscalosa,	J. H. Wallace,	Sept. 28, 29, 30, Oct. 1
Kentucky,	Louisville,	W. D. Gallagher,	Sept. 28, 29, 30, Oct. 1, 2
Maine,	Augusta,	—————	Sept. 21, 22, 23, 24
Missouri,	St. Louis,	Geo. R. Kalb,	Sept. 6, 7, 8, 9, 10, 11
New Hampshire,	Dover,	Jas. O. Adams,	Oct. 6, 7, 8
New Jersey,	Trenton,	Wm. W. C. Force,	Sept. 14, 15, 16, 17
New York,	Syracuse,	B. P. Johnson,	Oct. 5, 6, 7, 8
North Carolina,	Raleigh,	Wm. D. Cook,	Oct. 20, 21, 22, 23 (?)
Ohio,	Sandusky,	John H. Kelppart,	Sept. 14, 15, 16, 17
Rhode Island,	Providence,	W. R. Staples,	Sept. 14, 15, 16, 17, 18
South Carolina,	Columbia,	R. J. Gage,	Nov. 9, 10, 11, 12
Vermont,	Burlington,	Chas. Cummings,	Sept. 14, 15, 16, 17
Wisconsin,	Madison,	D. J. Powers,	Oct. 4, 5, 6, 7, 8

689 1858

MONTHLY BULLETIN

OF

The United States Agricultural Society.

Vol. I.] WASHINGTON, JULY, 1858. [No. 6.

LIST OF PREMIUMS

FOR THE

SIXTH NATIONAL EXHIBITION,

TO BE HELD AT THE CITY OF RICHMOND, VIRGINIA,

October 25, 26, 27, 28, 29, and 30, 1858.

A second edition, containing the Regulations of the Exhibition, the list of Judges, and the Daily Programme, will be issued on the 1st of October, in the *Bulletin* for that month. Those who do not receive this publication can have copies of that number mailed to them, gratuitously, by addressing Col. Chas. Dimmock, Secretary of the Virginia Central Agricultural Society, Richmond, Va.; or Ben: Perley Poore, Secretary of the United States Agricultural Society, at its office, No. 356 Pennsylvania avenue, Washington, D. C.

Cattle Department.

Class 1.— <i>Durham Bulls.</i>					Class 4.— <i>Devon Cows and Heifers.</i>				
Three years old and upwards,	1st	prem.,	\$100		Three years old and upwards,	1st	prem.,	\$75	
do.	do.	2d	do.	40	do.	do.	2d	do.	30
Two years old and under three,	1st	do.	50		Two years old and under three,	1st	do.	40	
do.	do.	2d	do.	20	do.	do.	2d	do.	15
One year old and under two,	1st	do.	25		One year old and under two,	1st	do.	25	
do.	do.	2d	do.	10	do.	do.	2d	do.	10
Under one year,	1st	do.	15		Under one year,	1st	do.	15	
do.	2d	do.	5		do.	2d	do.	5	
Class 2.— <i>Durham Cows and Heifers.</i>					Class 5.— <i>Ayrshire Bulls.</i>				
Three years old and upwards,	1st	prem.,	\$75		Three years old and upwards,	1st	prem.,	\$100	
do.	do.	2d	do.	30	do.	do.	2d	do.	40
Two years old and under three,	1st	do.	40		Two years old and under three,	1st	do.	50	
do.	do.	2d	do.	15	do.	do.	2d	do.	20
One year old and under two,	1st	do.	25		One year old and under two,	1st	do.	25	
do.	do.	2d	do.	10	do.	do.	2d	do.	10
Under one year,	1st	do.	15		Under one year,	1st	do.	15	
do.	2d	do.	5		do.	2d	do.	5	
Class 3.— <i>Devon Bulls.</i>					Class 6.— <i>Ayrshire Cows and Heifers.</i>				
Three years old and upwards,	1st	prem.,	\$100		Three years old and upwards,	1st	prem.,	\$75	
do.	do.	2d	do.	40	do.	do.	2d	do.	30
Two years old and under three,	1st	do.	50		Two years old and under three,	1st	do.	40	
do.	do.	2d	do.	20	do.	do.	2d	do.	15
One year old and under two,	1st	do.	25		One year old and under two,	1st	do.	25	
do.	do.	2d	do.	10	do.	do.	2d	do.	10
Under one year,	1st	do.	15		Under one year,	1st	do.	15	
do.	2d	do.	5		do.	2d	do.	5	

Class 7.— <i>Hereford Bulls.</i>					One year old and under two, 1st prem., \$25				
Three years old and upwards, 1st prem., \$100					do.	do.	2d	do.	10
do.	do.	2d	do.	40	Under one year,		1st	do.	15
Two years old and under three, 1st	do.			50	do.		2d	do.	5
do.	do.	2d	do.	20	Class 11.— <i>Grade Cows and Heifers.</i>				
One year old and under two, 1st	do.			25	Three years old and upwards, 1st prem., \$30				
do.	do.	2d	do.	10	do.	do.	2d	do.	15
Under one year, 1st	do.			15	Two years old and under three, 1st	do.			20
do.		2d	do.	5	do.	do.	2d	do.	10
Class 8.— <i>Hereford Cows and Heifers.</i>					Class 12.— <i>Native Cows and Heifers.</i>				
Three years old and upwards, 1st prem., \$75					Three years old and upwards, 1st prem., \$30				
do.	do.	2d	do.	30	do.	do.	2d	do.	15
Two years old and under three, 1st	do.			40	Two years old and under three, 1st	do.			20
do.	do.	2d	do.	15	do.	do.	2d	do.	10
One year old and under two, 1st	do.			25	Class 13.— <i>Yoked Working Oxen and Steers.</i>				
do.	do.	2d	do.	10	Four years old and upwards, 1st prem., \$50				
Under one year, 1st	do.			15	do.	do.	2d	do.	20
do.		2d	do.	5	Two years old and under four, 1st	do.			25
Class 9.— <i>Alderney Bulls.</i>					do.	do.	2d	do.	10
Three years old and upwards, 1st prem., \$100					Best driver, [servants' premium,]				5
do.	do.	2d	do.	40	Class 14.— <i>Fat Bullocks.</i>				
Two years old and under three, 1st	do.			50	Five years old and over, \$50				
do.	do.	2d	do.	20	Three years old and under five, 30				
One year old and under two, 1st	do.			25	Class 15.— <i>Fat Cows and Heifers.</i>				
do.	do.	2d	do.	10	Five years old and over, \$30				
Under one year, 1st	do.			15	Three years old and under five, 20				
do.		2d	do.	5	Discretionary Premiums will be awarded to meritorious animals of breeds not enumerated.				
Class 10.— <i>Alderney Cows and Heifers.</i>									
Three years old and upwards, 1st prem., \$75									
do.	do.	2d	do.	30					
Two years old and under three, 1st prem., \$40									
do.	do.	2d	do.	15					

Horse and Mule Department.

Class 16.— <i>Thorough-Bred Stallions.</i>					Three years old and under four, 2d prem., \$15				
Four years old and upwards, 1st prem., \$100					Two years old and under three, 1st	do.			20
do.	do.	2d	do.	40	do.	do.	2d	do.	10
Three years old and under four, 1st	do.			75	One year old and under two, 1st	do.			15
do.	do.	2d	do.	30	do.	do.	2d	do.	10
Two years old and under three, 1st	do.			50	Under one year old,				5
do.	do.	2d	do.	20	Class 19.— <i>Mares not thoroughbred.</i>				
One year old and under two, 1st	do.			25	Four years old and upwards, 1st prem., \$50				
do.	do.	2d	do.	10	do.	do.	2d	do.	25
Under one year old, 1st	do.			15	Three years old and under four, 1st	do.			30
do.	do.	2d	do.	5	do.	do.	2d	do.	15
Class 17.— <i>Thorough-Bred Mares.</i>					Two years old and under three, 1st	do.			20
Four years old and upwards, 1st prem., \$100					do.	do.	2d	do.	10
do.	do.	2d	do.	40	One year old and under two, 1st	do.			15
Three years old and under four, 1st	do.			75	do.	do.	2d	do.	10
do.	do.	2d	do.	30	Under one year old,				5
Two years old and under three, 1st	do.			50	Class 20.— <i>Heavy Draft Stallions.</i>				
do.	do.	2d	do.	20	Four years old and upwards, 1st prem., \$50				
One year old and under two, 1st	do.			25	do.	do.	2d	do.	25
do.	do.	2d	do.	10	Three years old and under four, 1st	do.			30
Under one year old, 1st	do.			15	do.	do.	2d	do.	15
do.	do.	2d	do.	5	Two years old and under three, 1st	do.			20
Class 18.— <i>Stallions not thoroughbred.</i>					do.	do.	2d	do.	10
Four years old and upwards, 1st prem., \$50					One year old and under two, 1st	do.			15
do.	do.	2d	do.	25	do.	do.	2d	do.	10
Three years old and under four, 1st	do.			30	Under one year old,				5

Class 21.—*Heavy Draft Mares.*

Four years old and upwards,	1st prem.,	\$50
do. do. 2d do.	25	
Three years old and under four,	1st do.	30
do. do. 2d do.	15	
Two years old and under three,	1st do.	20
do. do. 2d do.	10	
One year old and under two,	1st do.	15
do. do. 2d do.	10	
Under one year old,	5	

Class 22.—*Matched Horses, pairs, in harness.*

Geldings,	1st prem.,	\$50
do. 2d do.	25	
Mares,	1st do.	50
do. 2d do.	25	

Class 23.—*Roadsters, single, in harness.*

Geldings,	1st prem.,	\$30
do. 2d do.	15	
Mares,	1st do.	30
do. 2d do.	15	

Class 24.—*Saddle Horses, under the saddle.*

Geldings,	1st prem.,	\$30
do. 2d do.	15	
Mares,	1st do.	30
do. 2d do.	15	

Class 25.—*Ponies and horsemanship.*

Best pony, ridden by a lad	
under fourteen years of age,	
the horsemanship to be con-	
sidered also,	1st prem., \$20
Second best,	2d do. 10

Class 26.—*Trotting Stallions tested against time.*

Six years old and over,	1st prem., \$100
do. do. 2d do.	50
Under six years,	1st do. 75
do. 2d do.	30

Class 27.—*Trotting Mares tested against time.*

Six years old and over,	1st prem., \$100
do. do. 2d do.	50
Under six years,	1st do. 75
do. 2d do.	30

Class 28.—*Mules.*

Two years old and upwards,	1st prem., \$30
do. do. 2d do.	15
One year old and under two,	1st do. 20
do. do. 2d do.	10

Class 29.—*Asses.*

Jacks,	1st prem., \$40
do. 2d do.	20
Jennets,	1st do. 30
do. 2d do.	15

Sheep Department.

Class 30.—*Long Wooled Bucks.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 31.—*Long Wool Ewes, not less than three.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 32.—*South Down Bucks.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 33.—*South Down Ewes, not less than three.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 34.—*Saxon Bucks.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 35.—*Saxon Ewes, not less than three.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 36.—*Silesian Merino Bucks.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 37.—*Silesian Ewes, not less than three.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 38.—*French Merino Bucks.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 39.—*French Ewes, not less than five.*

Two years old and over,	1st prem.,	\$30
do. do. 2d do.	15	
One year and under two,	1st do.	25
do. do. 2d do.	10	
Under one year,	1st do.	15
do. 2d do.	5	

Class 40.— <i>Spanish Merino Bucks.</i>					One year and under two,			1st prem., \$25
Two years old and over,	1st prem.,	\$30	do.	do.	do.	do.	2d do.	10
do.	do.	2d do.	15	Under one year,	1st do.	15	do.	5
One year and under two,	1st do.	25	do.	do.	2d do.	5		
do.	do.	2d do.	10	Class 42.— <i>Live Muttons.</i>				
Under one year,	1st do.	15	do.	Not less than three,	1st prem.,	\$15		
do.	2d do.	5		do.	2d do.	10		
Class 41.— <i>Spanish Ewes, not less than five.</i>					Class 43.— <i>Slaughtered Mutton.</i>			
Two years old and over,	1st prem.,	\$30	Slaughtered mutton,	1st prem.,	\$10			
do.	do.	2d do.	15	do.	2d do.	5		

Swine Department.

Class 44.— <i>Large Breed Swine.</i>					Class 45.— <i>Small Breed Swine.</i>				
Boars, two years and upwards,	1st prem.,	\$25	Boars, two years and upwards,	1st prem.,	\$25				
do.	do.	2d do.	10	do.	do.	2d do.	10		
do. one year and under two,	1st do.	15	do. one year and under two,	1st do.	15				
do.	do.	2d do.	5	do.	do.	2d do.	5		
Sows, two years and upwards,	1st do.	25	Sows, two years and upwards,	1st do.	25				
do.	do.	2d do.	10	do.	do.	2d do.	10		
do. one year and under two,	1st do.	15	do. one year and under two,	1st do.	15				
do.	do.	2d do.	5	do.	do.	2d do.	5		
Sows and Pigs,	1st do.	20	Sows and pigs,	1st do.	20				
do.	2d do.	10	do.	2d do.	10				

Poultry Department.

Class 46.— <i>Larger Asiatic Fowls.</i>					Class 48.— <i>Ducks.</i>		
Shanghaes, red or buff,	best pair	\$5	Aylesbury,	best pair	\$5		
do. black,	do.	5	Java,	do.	5		
do. white,	do.	5	Muscovy,	do.	5		
Bramah Pootas,	do.	5	Poland,	do.	5		
			Rouen,	do.	5		
Class 47.— <i>Other Gallinaceous Fowls.</i>					Class 49.— <i>Geese.</i>		
Game,	best pair	\$5					
Spanish, black,	do.	5	African,	do.	5		
Dorkings, white,	do.	5	Bremen,	do.	5		
do. speckled,	do.	5	Hong Kong,	do.	5		
Hamburghs, silver pencilled,	do.	5	Mongrel,	do.	5		
do. gold do.	do.	5	Wild,	do.	5		
do. black,	do.	5					
Dominiques,	do.	5	Class 50.— <i>Turkies.</i>				
Polands, silver,	do.	5	Domestic,	do.	5		
do. golden,	do.	5	White,	do.	5		
do. white crested,	do.	5					
Bantams, white,	do.	5	Class 51.— <i>Guinea Fowls.</i>				
do. black,	do.	5	Best pair,	do.	5		

Farm and Garden Product Department.

Class 52.— <i>Samples of prized Tobacco.</i>					Bushel of Oats,			\$5
English shipping leaf,	1st prem.,	\$30	do.	Spring Barley,			5	
do.	2d do.	15	do.	Winter do.			5	
Continental shipping leaf,	1st do.	30	do.	Shelled White Corn,			5	
do.	2d do.	15	do.	do. Yellow do.			5	
Bright manufacturing wrapper,		30						
Sweet chewing manufacturing fillers,		30						
Class 53.— <i>Flour, Grain and Corn.</i>					Class 54.— <i>Vegetables and Seeds.</i>			
Barrel of Flour,	1st prem.,	\$10	Bushel Irish Potatoes,		\$5			
do.	2d do.	5	do. Sweet Potatoes,		5			
Bushel of Winter Wheat,	1st do.	10	do. Yams,		5			
do.	2d do.	5	do. Mangel Wurtzel Beets,		5			
Bushel of Spring Wheat,	1st do.	10	do. Sugar do.		5			
do.	2d do.	5	do. Carrots,		5			
Bushel of Rye,	1st do.	10	do. Turnips,		5			
	2d do.	5	Collection garden vegetables,	1st prem.,	20			
			do.	do.	2d do.	10		

Class 55.—*Other Staple Products.*

Bag of Cotton, (exhibited by grower,)	\$10
Barrel of Sugar, do.	10
Fifty pounds Sugar from Chinese cane,	10
Five gallons molasses, do.	5
Barrel of Rice,	5
Fifty pounds Dressed Flax,	5
do. Dew Rotted Hemp,	5
do. Water Rotted do.	5
Fleece of long Wool,	5
do. middle do.	5
do. Merino do.	5
do. Saxony do.	5

Class 56.—*Fruits.*

Collection of Apples,	1st prem., \$20
do. do. do. 2d do.	10
do. Pears, do. 1st do.	20
do. do. do. 2d do.	10

Collection of Peaches, do.	1st prem., \$20
do. do. do. 2d do.	10
do. Native Grapes,	1st do. 10
do. do. 2d do.	5
do. Foreign do.	1st do. 10
do. do. do. 2d do.	5

Class 57.—*Beverages.*

[In samples of two or more quart bottles.]	
Sparkling Catawba, 1857,	silver medal.
do. do.	bronze do.
Dry do.	silver do.
do. do.	bronze do.
Wine from other grape,	silver do.
do.	bronze do.
Currant Wine,	silver do.
do.	bronze do.
Barrel of Cider,	silver do.
do.	bronze do.

Horticultural and Domestic Department.

Class 58.—*Flowers and Floral Designs.*

Display of Exotics,	1st prem., \$10
do. do. 2d do.	5
do. Hardy plants,	1st do. 10
do. do. 2d do.	5
do. Annuals,	1st do. 10
do. do. 2d do.	5
Floral Design,	1st do. 10
do. 2d do.	5
Pair circular hand bouquets,	5
Basket bouquet for table,	5
Suspended basket bouquet,	5
Large bouquet,	5

Class 59.—*Domestic Productions.*

Ham, boiled,	1st prem., \$10
do. 2d do.	5
Fresh Butter, ten pounds,	1st do. 10
do. do. do. 2d do.	5
Firkins do. do. 1st do.	10
do. do. do. 2d do.	5
Cheese, old, do. 1st do.	10
do. do. do. 2d do.	5
do. new, do. 1st do.	10
do. do. do. 2d do.	5
Lard, do. 1st do.	5
do. do. 2d do.	3
Honey, do. 1st do.	5
do. do. 2d do.	3
Collection preserved fruits,	1st do. 5
do. do. 2d do.	3
do. jellies 1st do.	5
do. do. 2d do.	3
do. pickles, 1st do.	5
do. do. 2d do.	3
Wheat bread, three loaves,	1st do. 5
do. do. 2d do.	3
Corn bread, do. 1st do.	5
do. do. 2d do.	3
Sponge Cake, do. 1st do.	5
do. do. 2d do.	3
Pound Cake, do. 1st do.	5
do. do. do. 2d do.	3
Fruit do. do. 1st do.	5
do. do. do. 2d do.	3

Class 60.—*Domestic Manufactures.*

Best ten yards woolen cloth,	\$10
do. do. satinete,	10
do. do. jeans,	10
do. do. linsey,	10
do. do. flannel,	10
do. do. linen,	10
do. three ounces sewing-silk,	5
do. do. flax-thread,	5
do. six cuts woolen yam,	5
do. do. cotton do.	5
do. made fine shirts,	5
do. knit woolen undershirt,	5
do. do. drawers,	5
do. pair long woolen stockings,	5
do. do. do. cotton do.	5
do. do. woolen socks,	5
do. do. cotton do.	5
do. woolen carpet,	5
do. white counterpane,	1st prem., 10
do. do. do. 2d do.	5
do. patchwork quilt,	1st prem., 10
do. do. do. 2d do.	5
do. ornamented counterpane,	5
do. do. table-cover,	5
do. do. hearth rug,	5
do. do. chair cover,	5
do. do. set of tidies,	5
do. do. lamp-mats,	5
do. needle-worked infant's dress,	5
do. do. handkerchiefs,	5
do. do. undersleeves,	5
do. do. cape or collar,	5
do. do. cap,	5
do. silk embroidery,	5
do. worsted do.	5
do. crocheted work,	5
do. pair of slippers,	5
do. ornamented leather work,	5
do. do. wax-work,	5
do. straw hat, [servants' premiums,]	5
do. husk collars, do.	5
do. straw chairs, do.	5
do. door mats, do.	5

Mechanical Department.Class 61.—*Locomotive Farm Engines.*

For the best Locomotive Farm Engine, of not less than ten horse power, containing improvements never exhibited at the fairs of the United States Agricultural Society, the price, economy of working, and safety being taken into consideration, will be awarded the *Grand Gold Medal of Honor*. Engines exhibited to be put to such tests as the committee of judges may think proper.

Class 62.—*Ploughs.*

Plough for general use,	1st prem.	silver medal
do. do.	2d	do. bronze do.
do. stubble,	1st	do. silver do.
do. do.	2d	do. bronze do.
do. sod,	1st	do. silver do.
do. do.	2d	do. bronze do.
do. subsoil,		do. do.
do. side-hill,		do. do.
do. digging potatoes,		do. do.

Class 63.—*Rollers, Harrows, Sowers, &c.*

Field Rollers,	1st prem.	silver medal
do.	2d	do. bronze do.
Clod Crushers,		silver do.
Harrows,	1st	do. do. do.
do.	2d	do. bronze do.
Corn planter, (horse,)	1st	do. silver do.
do. do.	2d	do. bronze do.
do. (hand,)		do. do.
Grain drill, (horse,)	1st	do. silver do.
do. do.	2d	do. bronze do.
do. (hand,)		do. do.
Potato planter,		silver do.
Broadcast Sowers,	1st	do. do. do.
do.	2d	do. bronze do.
Corn cultivator,	1st	do. silver do.
do.	2d	do. bronze do.
Horse-hoe for drills,	1st	do. silver do.
do. do.	2d	do. bronze do.
Stump Extractor,		do. do.
Ditching Machine.		do. do.
Farm or road Scraper,		do. do.

Class 64.—*Harvesting Machines and Implements.*

Mower and Reaper,	1st prem.	silver medal
do.	2d	do. bronze do.
Mower,	1st	do. silver do.
do.	2d	do. bronze do.
Reaper,	1st	do. silver do.
do.	2d	do. bronze do.
Automaton rake,		silver do.
Horse,		do. do.
Six hay rakes,		bronze do.
Six grain cradles,		do. do.
Six grass scythes,		do. do.
Six scythe snaths,		do. do.
Six hay forks,		do. do.
Six sickles,		do. do.
Threshing machine,	1st prem.	silver do.
do. do.	2d	do. bronze do.
Horse-power,	1st	do. silver do.
do.	2d	do. bronze do.
Fanning mill,	1st	do. silver do.
do.	2d	do. bronze do.
Corn-stalk cutter,		silver do.
Clover seed harvester,		bronze do.
Tedding machine,		do. do.

Class 65.—*Agricultural Machines.*

Corn and cob mill,	1st prem.	silver medal
do.	2d	do. bronze do.
Portable flour mill,	1st	do. silver do.
do.	2d	do. bronze do.
Corn husker,	1st	do. silver do.
do.	2d	do. bronze do.
Corn sheller,	1st	do. silver do.
do.	2d	do. bronze do.
Hay and straw cutter,	1st	do. silver do.
do.	2d	do. bronze do.
Root	1st	do. silver do.
do.	2d	do. bronze do.
Sorgho mill,	1st	do. silver do.
do. do.	2d	do. bronze do.
Cider do.	1st	do. silver do.
do. do.	2d	do. bronze do.
Hay press,	1st	do. silver do.
do.	2d	do. bronze do.
Windmill for pumping,	1st	do. silver do.
do. do.	2d	do. bronze do.

Class 66.—*Agricultural Tools.*

Set Garden tools,	silver medal.
do.	bronze do.
Carpenter's tools for farm use,	silver do.
do. do.	bronze do.
Spades, (at least two,)	do. do.
Shovels, do.	do. do.
Heavy hoes, do.	do. do.
Light do. do.	do. do.
Iron rakes, do.	do. do.
Chopping axes, do.	do. do.
Mattocks, do.	do. do.
Post augurs,	do. do.
Jack screw,	do. do.
Sheep shears,	do. do.

Class 67.—*Wagons, Carts, Castings, &c.*

Large Horse wagon,	silver medal.
Small do.	do. do.
Horse Cart,	do. do.
Ox Cart,	do. do.
Wagon harness,	do. do.
Cart do.	do. do.
Riding saddle and bridle,	do. do.
Ox Yoke,	bronze do.
Wheel barrow,	do. do.
Large platform scales,	silver do.
Small do.	bronze do.
Farm pumps,	do. do.
Water rams,	do. do.
Wire fence,	do. do.
Drain tiles,	do. do.
Agricultural boiler,	do. do.
Cast iron chairs and vases,	do. do.
Stoves,	do. do.
Grindstone,	do. do.

Class 68.— <i>Household Implements and Utensils.</i>				Apple parer,	bronze medal
Hand Looms,		silver Medal.		Brooms, (half dozen,)	do. do.
Spinning wheels, (flax,)		bronze do.		Sewing machine, 1st prem.,	silver do.
do. (wool,)		do. do.		do. 2d do.	bronze do.
Churns,	1st prem.,	silver do.		Preserving fruit cans,	do. do.
do.	2d do.	bronze do.		Collection earthen ware,	do. do.
Butter worker,		do. do.		Display kitchen utensils,	silver do.
Refrigerator,		do. do.		do.	bronze do.
Cheese press,		do. do.		Cedar pails, [servants' premiums]	do. do.
Washing machine,		do. do.		Corn baskets,	do. do.
Sausage meat cutter,		do. do.		Willow do.	do. do.
do. stuffer,		do. do.		Set wooden measures, do.	do. do.

General Utility and Art Department.

Class 69.— <i>Instruments, Apparatus, Guns, &c.</i>				Class 71.— <i>Paintings, Maps, Designs, &c.</i>			
Surveyor's compass,		silver medal.		Oil pictures of animals,		silver medal	
Barometer,		do. do.		do. do.		bronze do.	
Dynamometer,		do. do.		Daguerotypes	do.	silver do.	
Thermometer,		bronze do.		do. do.		bronze do.	
Measuring chain,		do. do.		Wood cuts,	do.	silver do.	
Rain-guage,		do. do.		do. do.		bronze do.	
Set drawing instruments,		do. do.		Map of an estate,		silver do.	
Set grafting and budding knives,	do.	do.		do.		bronze do.	
Set fleams,	do.	do.		Design for a farm house, (south,)	silver	do.	
Set glass bottles for specim's seeds,	do.	do.		do. do. do.	bronze	do.	
Medicine chest for farm-use,	do.	do.		do. do. (north,)	silver	do.	
Lighting rods,	do.	do.		do. do. do.	bronze	do.	
Farm and plantation journals,	do.	do.		do. stable,	do.	do.	
Double barrelled gun, 1st prem.,	silver	do.		do. granary,	do.	do.	
do. do. 2d do.	bronze	do.		do. dairy house,	do.	do.	
Single do. 1st do.	silver	do.		do. poultry house,	do.	do.	
do. do. 2d do.	bronze	do.		Model of bridge,	do.	do.	
Rifle, 1st do.	silver	do.		do. gate,	do.	do.	
do. 2d do.	bronze	do.		do. fence,	do.	do.	

Class 70.— <i>Silverware for premiums.</i>				Class 72.— <i>Collections Minerals, &c.</i>			
Pitcher, to be furnished at \$100,	silver medal.			Collection useful minerals of Virginia,			
Teapot, do. do. 75,	do. do.			not less than two specimens			
Sugar bowl, do. do. 50,	do. do.			each variety,	silver med.		
Butter dish,	do. do. 50,	do. do.		do. do.	bronze do.		
Dozen large spoons,	do. 40,	do. do.		do. any other State,	do. do.		
Cream jug,	do. 25,	do. do.		do. minerals illustrating			
Dozen teaspoons,	do. 25,	do. do.		geology of Virginia, 1st,	silver do.		
Cup,	do. 10,	do. do.		do. do. do. 2d,	bronze do.		
Butter knives,	do. 5,	bronze do.		do. Fossils	do. silver do.		
Cream ladles,	do. 5,	do. do.		do. Woods	do. do. do.		
Plated cake baskets,	10,	do. do.		Herbarium,	do. do. do.		

THE PREMIUM LIST FOR 1858 is in reality more liberal than that at any preceding National Fair, as the entry-fees will be greatly reduced, and entirely dispensed with in the Horticultural, Domestic, Product, General Utility and Art Departments. Many articles exhibited in these Departments will necessarily be consumed, and the Grains and Seeds are to be retained for distribution to foreign Agricultural Societies.

PREMIUMS to be awarded in plate, of which there will be a large and beautiful display, enabling successful competitors to choose such articles as they may prefer, for their premiums.

CERTIFICATES will be given with each premium, and *Certificates of Merit* will also be awarded by the Executive Committee, upon the recommendation of Committees. Should the receipts warrant, the Executive Committee will also award *Discretionary Premiums* when recommended.

THE GROUNDS at Richmond are commodious and accessible. There are stalls for the exhibition of animals, with halls and tents for the proper display of machinery, products, &c., and a track for trials of speed against time, processions of horses, &c.

THE EXHIBITION OF HORSES AND CATTLE at the Judges' Stand for the decision of the Judges, and the designation of premiums by affixing ribbons of designated colors, will add a continuous interest to the Exhibition.

UNITED STATES AGRICULTURAL SOCIETY.—A quarterly meeting of the Executive Committee was held at Barnum's Hotel, Baltimore, on the 21st of July. *Present*—President Tilghman, Messrs. J. McGowan of Pennsylvania, John Merryman of Maryland, and Josiah Ware of Virginia, and Secretary Poore.

Letters were read from Messrs. Fred'k Smyth of New Hampshire, Henry Wager of New York, and Henry Wilson of Ohio, giving reasons for their non-attendance.

President Tilghman, to whom had been referred the arrangements for holding the Sixth Annual Exhibition, read the correspondence and subsequent agreement with Hon. James Lyons, President of the Virginia Central Society, for holding a joint exhibition at Richmond, in the last week in October, the Virginia Central Society furnishing the grounds, &c., and guaranteeing the payment of ten thousand dollars in premiums, in addition to the expenses of the United States Society.

On motion of Mr. McGowan, the action of President Tilghman in relation to the Exhibition was approved and endorsed.

The Premium List was then taken up, and after a careful revision adopted.

On motion of Mr. Ware, the President was authorized to appoint members of the Society as Delegates to attend the various State Fairs.

On motion of Mr. McGowan, it was resolved that premiums be offered for essays on important subjects, to be awarded prior to the next annual meeting, the prize-essays to be published in the next volume of transactions.

At two o'clock, a. m., the Committee adjourned, to meet again at the call of the President.

THE BULLETIN for the present month is so filled up with the premium-list of the next Exhibition, that the record of Government agricultural operations, agricultural patents granted, &c., is necessarily postponed until the August number.

ARRANGEMENTS WITH RAILROADS.—The officers of railroads at the north and the west have made very liberal arrangements for the transportation of animals and articles for exhibition at the State fairs, either altogether free, or at half the usual rates, and it is to be hoped that an equal liberality will be manifested on the various routes leading to Richmond.

DELEGATES to the Exhibition at Richmond have already been appointed by several State Boards and Societies. It is to be hoped that there will be a general representation of all who are interested in the welfare and progress of American Agriculture.

EXHIBITIONS FOR 1858.

<i>States.</i>	<i>Places.</i>	<i>Time.</i>	<i>Secretaries.</i>
Alabama,	Montgomery,	Oct. 18 to 22,	N. B. Cloud, Montgomery.
California,	Marysville,	Aug. 23 to 27,	Rev. O. C. Wheeler, Sacramento.
Connecticut,	Hartford,	Oct. 12 to 15,	Henry A. Dyer, Brooklyn.
Georgia,	Atlanta,	Oct. 10 to 23,	Jas. Camak, Athens.
Illinois,	Centralia,	Sept. 14 to 17,	S. Francis, Springfield.
Indiana,	Indianapolis,	Oct. 4 to 9,	John B. Dillon.
Iowa,	Oscalooza,	Sept. 28 to Oct. 1,	J. H. Wallace, Muscatine.
Kentucky,	Louisville,	Oct. 5 to 8,	W. D. Gallagher, Louisville.
Maine,	Augusta,	Sept. 21 to 24,	E. Holmes, Winthrop.
Maryland,	Baltimore,	Oct. 19 to 22,	
Michigan,	Detroit,	Sept. 28 to Oct. 1,	J. C. Holmes, Lansing.
Missouri,	St. Louis,	Sept. 6 to 11,	Geo. R. Kalb.
New Hampshire,	Dover,	Oct. 6 to 8,	I. C. Wingate.
New Jersey,	Trenton,	Sept. 14 to 17,	W. C. Force, Trenton.
New York,	Syracuse,	Oct. 5 to 8,	B. P. Johnson, Albany.
North Carolina,	Raleigh,	Nov. 2 to 6,	Wm. D. Cook.
Ohio,	Sandusky,	Sept. 15 to 19,	J. H. Kelppart, Cincinnati.
Pennsylvania,	Pittsburg,	Sept. 28 to Oct. 1,	
Rhode Island,	Providence,	Sept. 28 to Oct. 1,	Wm. R. Staples.
South Carolina,	Columbia,	Nov. 9 to 12,	R. J. Gage.
Vermont,	Burlington,	Sept. 14 to 17,	Chas. Cummings, Brattleboro.'
Virginia,	Petersburg,	Nov. 2 to 6,	T. S. Pleasants, Petersburg.
Wisconsin,	Madison,	Oct. 4 to 9,	D. J. Powers, Madison.
United States,	Richmond, Va.,	Oct. 25 to 30,	B. P. Poore, Washington, D. C.
Horse Exhibition,	Springfield, M.,	Sept. 14 to 17,	J. N. Bagg, Springfield, Mass.
Canada East,	Montreal,	Sept. 28 to Oct. 1,	
Canada West,	Toronto,	Sept. 28 to Oct. 1,	Geo. Buckland, Toronto.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, AUGUST, 1858.

[No. 7.

THE SIXTH NATIONAL AGRICULTURAL EXHIBITION, which is to be held in the city of Richmond, Virginia, on the 25th, 26th, 27th, 28th, 29th and 30th days of October, will equal, if it does not surpass, any of the Farmers' Festivals held with such decided success by the United States Agricultural Society in different sections of the Union. Gen. Caleb Cushing, of Massachusetts, has accepted the appointment of Orator, and a large proportion of the distinguished statesmen and agriculturalists especially invited, have already signified their intention to be present. Exhibitors of stock, products, fruit, flowers, machinery, implements, &c., &c., are making preparation to attend, and it is certain that "a thousand hills and valleys" will be represented at this Industrial Congress—a visible type of the agricultural interest of our country, on which some thirty millions of beings are dependent for their "daily bread." The co-operation of every American having it in his or her power to contribute in any way to the success of this National display, is respectfully and earnestly solicited.

The following address "*To the Agriculturists and Mechanics of Virginia*," shows that the Sons of the Old Dominion anticipate a "generous rivalry" with competitors from other states, and are prepared to receive them with that "noble hospitality" which they proudly claim as their birth-right. Let each state take care to be well represented.

ADDRESS OF THE VIRGINIA CENTRAL AGRICULTURAL SOCIETY, TO THE AGRICULTURISTS AND MECHANICS OF VIRGINIA. "The undersigned have been deputed to address you in relation to the Virginia Central Agricultural Society—its aims and objects, and especially the Cattle Show and Fair which will be held at the Fair Grounds, near this city, on the 25th day of October, and the ensuing five days, and most respectfully we invite your attention while we do so, promising you in return, the utmost brevity which may be consistent with intelligent explanation.

"As you know, the State Agricultural Society has held its Cattle Show and Fair annually for years past at the Fair Grounds which were provided for it by the City of Richmond; as you also know, the Executive Committee of that Society determined not very long since, to hold the next Show and Fair at the grounds of the Union Society, near Petersburg, under the auspices of that Society. That determination left the extensive and beautiful Fair Grounds of Richmond unoccupied, and cut off the Metropolis, the commercial and political centre of the State, from its annual intercourse with the farmers, graziers and artisans of the State.

"The people living at and near the centre were not content that this estrangement should exist, and they determined that the enjoyment so often experienced and so much delighted in by them, of meeting the great body and elite of the farming gentry and mechanics of our State in their annual and primary assembly, with the noble and beautiful specimens which they brought of their skill and industry in producing, rearing and manufacturing whatever can be necessary or useful for the comfort of our people, should continue. The hearty welcome, the cordial intercourse, and even the painful parting, which excited the deep impression which the intercourse of a week even, with all its exciting incidents and generous rivalry, could not be given up, and as we have said, our people at and near the centre determined they should not be given up, and they met and organized the Virginia Central Agricultural Society, of which we are the representatives. We have endeavored to perform, with a single eye to the end in view, the duty assigned us, and we have now the great satisfaction to announce to you that the United States Agricultural Society will hold its next annual Cattle Show and Fair in connection with us, at our Fair Grounds, on the 25th day of October next, and the five following days.

"We have great pleasure in this event, and we congratulate you upon it, and earnestly and respectfully invite you to attend the Fair and bring with you your finest specimens of your skill and industry in all the departments of agriculture and manufactures, and especially of your live stock of every kind. The United States Agricultural Society, with which we co-operate this year, was organized in June, 1852, under the auspices of some of the most distinguished men of the nation, who have ever since controlled and directed it, with the aid

of constant accessions of men of equal respectability and rank; and at its last annual meeting the Agricultural Societies of twenty-eight States were present by their deputies, while the President of the United States, several members of his Cabinet, and many members of the Senate and House of Representatives, testified their interest in it, and lent additional grace and dignity to its sessions by their presence. The late President of it, Hon. Marshall P. Wilder, is known throughout the country for his zeal in the cause of Agriculture, his intelligence and high character; and its present President, General Tench Tilghman, is familiar to us all as one of the most distinguished sons of our sister State of Maryland. Its great Cattle Show and Fair has been held in five of the States, which eagerly sought its presence among them. You have before you its rich premium list, and you will have no difficulty in believing us when we tell you that its Cattle Show and Fair has always been the grandest and most magnificent ever held in the Union, and we cannot but congratulate you upon the fact that its next Show and Fair will be held in your midst and we cannot doubt that you will meet it with all the cordiality and hospitality which distinguishes our people, and vindicate the claims of Virginia to high consideration in Agriculture and the Mechanic Arts, by the specimens of your skill in each, which you will bring to compete with those of our friends and brothers from the other States, who will bring their best and noblest to bear the palm, and the premiums with it, from the sons of the Old Dominion. Meet them in generous rivalry, with the noble hospitality which is your birth-right, but meet them, we pray you, with the best you have, and if they beat you, confess their prowess, but shrink not from the encounter.

"We have heard that it is said that our Society is inimical, or will be injurious to the State Society, and ought not, therefore, to be encouraged. This opinion is so simple and palpable an error that it is difficult to suppose that those who urge it are altogether candid, if intelligent. Nevertheless, we shall treat it as a candid objection, and briefly answer it. And first let us enquire who were the most prompt, energetic and liberal supporters of the State Society? Every one must reply that Richmond and her citizens of all classes, but especially her merchants and millers, than whom there is not to be found in this State, (or out of it,) in proportion to their numbers, a more liberal, intelligent and patriotic body of men. When did they ever suggest anything which was inimical to the great cause of agriculture, or the welfare of the State? Why should they desire to break down or injure the State institution which they were mainly instrumental in erecting?

"Secondly, let us inquire how the Central Society can injure the State Society? It cannot be by the mere fact of existence, because both Societies would be indeed mythical in effect if they confined themselves to their chambers and debating rooms, and held no Cattle Show and Fair. The injury, if any, therefore, must result from the Show and Fair. The question, then, simply is, how can a Cattle Show and Fair at Richmond injure a similar Show and Fair at Petersburg or elsewhere? To this we answer without hesitation, that it cannot have that effect unless that at Richmond be held so as to conflict with that at Petersburg—and we have as little hesitation in adding, that so far from injuring the Fair at Petersburg, the Fair at Richmond must prove beneficial to that at Petersburg, being held as it will be, one week in advance of it. That the existence of our Society cannot of itself injure the State Society, we suppose to be so palpable a truth that it is only necessary to state it to command universal assent. But if any man doubts, let him remember the fact that when that Society held its Fairs at Richmond, there were, and still are, at least one dozen other Agricultural Societies in the State, and then ask the question, were they the enemies of the State Society or was it their enemy? That they were not its enemies we feel satisfied that every member of each one of them will answer, and accordingly most of their members are also members of the State Society, as each one of us is, and some of us life members.

"Is, then, the State Society the enemy of the provincial Societies? As members of the State Society, as men who would deal justly with it, we answer that question in the negative—we say *no*; for, however, it may be that some of its members, partly because they dislike Richmond, partly because they are vexed with it, and what is worse, vexed with themselves, are enemies to our Society, the State Society cannot be the enemy of the provincial Societies without proclaiming itself to be the most absurd and suicidal monopoly in the world, which, by the avowal of its hostility, would render itself odious throughout Virginia; and if not the enemy of the provincial Societies generally, why should it be our enemy—why select us as the special and exclusive object of its hostility? No man can give a reason for imputing such feelings to it, and in its behalf we protest that they do not exist. The State Society, on the contrary, holds, as it should, the relation of the parent Society to us its scattered children, who come once a year to pay a filial visit to it, and of this it has just given the most touching evidence, by throwing itself into the arms of the Petersburg Society, when it thought the Council of Richmond was cold to it. Would it have done this if it regarded the Petersburg Society as its enemy? By its act it has justified our opinion; and we may inquire if it was not proper in Petersburg to have a Society, and hold a Fair, when the State Society met and its Fair was held at Richmond; how can it be improper in Richmond to have a Society hold a Fair, when the State Society meets and holds its Fair at Petersburg? The idea of our Society and Fair injuring the State Society and Fair is simply ludicrous.

But we do not stop with that exposure; we affirm that our Fairs must be beneficial to

that at Petersburg, and so aid, not injure, the State Society, because the greater number of opportunities which are afforded to the farmer, grazier and mechanic to exhibit his stock within a reasonable compass, the better for him, as he may thereby get several premiums; or, if he fails at one place he may succeed at another—and therefore, the occurrence of two Fairs in two successive weeks, within one hour's travel of each other, will bring out more exhibitors than one Fair would.

"Again; many of the exhibitors at Petersburg must pass through Richmond, or the Petersburg Fair must be small, comparatively. Now, every exhibitor who would come from any point North or Northwest or Northeast of Richmond, to a Fair at Petersburg, will come more certainly if he can find a Fair at Richmond on his way to Petersburg; and it may be safely predicted of every exhibitor who comes to Richmond, that he will go over to the Petersburg Fair simply before he returns home. This will be true of our own Fair; but can any man doubt, that, bringing as the United States Society will do, exhibitors and visitors from every other State, and probably from every part of the Union, who would not come otherwise, many, if not all of them, will go to Petersburg who would not otherwise see them.

"In conclusion, we cordially and earnestly invite you, and all other lovers of our great mother Agriculture, to come up to our meeting in October, and bring with you the fatted calf and the choicest fruits of the earth, and the most beautiful specimens from the loom and the spindle and the machine shop, with the noblest specimen of that blood in your horses, which has made the Virginia horse renowned everywhere.

"Richmond and her neighbors throw wide their hospitable doors, and bid you come. We say come—the cause cries come—and when weary of us, we will escort you to the Halls and Fair Grounds of our yet more hospitable, charming and patriotic sister, Petersburg, and there too, aid the cause of Agriculture."

JAMES LYONS, Pres't.

H. C. Cabell, J. L. Davis, C. Bruce, R. Archer, J. W. Ware, J. A. Selden, Hill Carter, W. B. Stanard, W. C. Wickham, H. B. Tomlin, Wm. Allen, Geo. M. Savage, Jacob A. Baylor, N. B. Hill, *Executive Committee.*

CHARLES DIMMOCK, *Secretary.*

ARIZONA. Lieut. Sylvester Mowry, in reply to a letter from Rev. Samuel M. French, asking "what are the agricultural advantages of Arizona, and what are its most fertile regions, has published an interesting document, from which the following paragraphs are extracted:

"The principal valleys on the East are the Rio Grande, from lat. 34° South to El Paso—about two degrees of latitude—including the well known Mesilla. A population of some ten thousand souls—mostly Mexican, occupy portions of this section, congregated in the towns of Mesilla, La Mesa and Santa Barbara. There is ample room here for thousands more. The soil is productive. Land lies well for irrigation and water is abundant. The climate, although warm during the summer months, is healthy throughout the year. All the cereals grow well here, together with some of the semi-tropical fruits. The Grape grows luxuriantly, and the El Paso wine will take no humble place among those of native growth—whether of Ohio or California. The Mesilla and Rio Grande valleys are gradually acquiring population, and offer every inducement to emigrants in search of good soil, fine climate and pleasant homesteads. The market for produce is mostly confined to the supply of the army and to home consumption at present, but the development of the undoubted mineral wealth in silver of the Organ mountains—across the Rio Grande and in the vicinity of the valley, will, at no distant day, give a much more extensive and lucrative trade to the agriculturist. The country west of the Rio Grande, for two hundred and fifty miles (250) to the San Pedro River, is the finest grazing country in the world. This opinion is sustained by Gen. Joseph Lane, the distinguished delegate from Oregon, and by Col. Jack Hays, of Texas, in letters addressed to me. Both of these gentlemen travelled through Arizona before it became a portion of U. S. Territory, and there are few men in the world, whose judgment upon questions of soil and agricultural value, is so thoroughly reliable.

"West of the Santa Cruz, except on the Gila River, until you reach the Colorado, the country is not inviting to the farmer, although rich in minerals. Throughout the whole length of the Gila—five hundred miles—there are many extensive and rich tracts of arable land, lying well for irrigation, with plenty of water. Wheat, corn, cotton, melons, pumpkins, beans and millet, grow abundantly, with little labor, and the soil seems inexhaustible. The Pimos Indians have raised all these crops for a long series of years on the same soil, without manure and with no apparent diminution in the yield. North of the Gila, completely in the possession of the Indians, are several large valleys, watered by bold streams—alive with fish—and magnificently timbered with oak, pine and cotton wood."

PEDIGREES. Persons intending to exhibit *thorough-bred* Horses or Cattle, at Richmond, will be required to furnish pedigrees of the animals to be exhibited, in writing, at the time of making their entries. The standard authority in all cases of pedigree of Horses, will be the English Stud Book and the American Turf Register; for Cattle, the English and American Herd Books. Entries must specify the exhibitor's name and Post Office address, and the age of the animal offered. No animal to be entered in the name of any other than the *bona-fide* owner, either by himself or his agent.

DELEGATES TO EXHIBITIONS. The Executive Committee of the United States Agricultural Society have appointed the following delegates to State and other prominent Agricultural Exhibitions. It is hoped that they will find it convenient to attend, and that they will not only present reports of what they see and hear, at the next annual meeting of the United States Agricultural Society, but that they will urge upon the exhibitors of superior stock, implements, products, &c., the importance of again exhibiting at the National Fair, at Richmond.

Alabama.—C. H. McCormick, Chicago, Illinois; P. St. George Cocke, Jefferson, Virginia; Alva Gage, Charleston, South Carolina.

California.—Henry F. French, Exeter, New Hampshire; A. P. Bradford, California; N. B. Lawrence, Newport, Rhode Island.

Connecticut.—Anthony Kimmel, New London, Maryland; P. M. Nightingale, Albany, Georgia; A. H. Brand, Lexington, Kentucky.

Georgia.—David Landreth, Philadelphia, Pennsylvania; W. H. Harris, Nashville, Tennessee; W. D. Stewart, Syracuse, New York.

Illinois.—L. G. Morris, Mount Fordham, New York; Harvy Dodge, Sutton, Massachusetts; Townsden Glover, Washington, D. C.

Indiana.—R. P. Underhill, Mount Pleasant, New York; Wm. Gill, Columbus, Ohio; Edward D. Hobbs, Louisville, Kentucky.

Iowa.—D. J. Browne, Washington, D. C.; John Pope, Memphis, Tennessee; William Kelly, Rhinebeck, New York.

Kentucky.—Josiah W. Ware, Berryville, Virginia; Ramsey McHenry, Baltimore, Maryland; David Leavitt, Great Barrington, Massachusetts.

Maine.—Charles W. Harriman, Andalusia, Pennsylvania; Eben Wight, Dedham, Massachusetts; Pells Manny, Freeport, Illinois.

Maryland.—Thomas Amory, Boston, Massachusetts; J. Stanton Gould, Hudson, New York; James T. Worthington, Chillicothe, Ohio.

Massachusetts.—*Springfield Horse Exhibition.*—Frederic Symth, Manchester, N. H.; Wm. S. King, Roxbury, Massachusetts; Benjamin Alston, Georgetown, S. C.

Michigan.—J. P. Barret, St. Louis, Missouri; Ivers Phillips, Fitchburg, Massachusetts; Walter A. Wood, Hoosic Falls, New York.

Missouri.—*St Louis Agricultural and Mechanical Association.*—Wm. Duane Wilson, Mount Pleasant, Iowa; N. Longworth, Cincinnati, Ohio; Edward D. Hobbs, Louisville, Kentucky.

New Hampshire.—Marshall P. Wilder, Boston, Massachusetts; James N. Thompson, Wilmington, Delaware; Lawrence Young, Louisville, Kentucky.

New Jersey.—Charles B. Calvert, Bladensburg, Maryland; Arthur Watts, Chillicothe, Ohio; S. Cooper, Boston, Massachusetts.

New York.—John M'Gowan, Bridesburg, Pennsylvania; John Brooks, Princeton, Massachusetts; H. K. Burgwyn, Halifax, North Carolina.

New York.—*American Pomological Convention.*—L. E. Berckman, Plainfield, New Jersey; B. V. French, Boston, Massachusetts; J. L. Darlington, West Chester, Pennsylvania.

North Carolina.—B. P. Johnson, Albany, New York; Charles L. Flint, Boston, Massachusetts; Oden Bowie, Prince George, Maryland.

Ohio.—J. S. Beckman, Kinderhook, New York; B. B. French, Washington, D. C.; J. T. Brown, Providence, Rhode Island.

Pennsylvania.—Edmund Ruffin, Old Church, Virginia; Robert Mallory, Louisville, Kentucky; B. S. Heming, Oskosh, Wisconsin.

Rhode Island.—John Jones, Middleton, Delaware; Moses G. Cobb, Dorchester, Massachusetts; A. P. Hatch, Newberne, Alabama.

South Carolina.—Aaron Clement, Philadelphia, Pennsylvania; William W. Corcoran, Washington, D. C.; Charles Ridgeley, Hampton, Maryland.

Vermont.—J. H. McHenry, Pikesville, Maryland; Elisha Dyer, Providence, Rhode Island; DeLorma Brooks, Beloit, Wisconsin.

Virginia.—Henry Wager, Rome, New York; Samuel Medary, Columbus, Ohio; J. N. Goldsborough, Easton, Maryland.

Wisconsin.—Henry Wilson, Columbus, Ohio; Robert C. Winthrop, Boston, Massachusetts; G. D. Hastings, Toland, Connecticut.

Tennessee.—Richard Peters, Atlanta, Georgia; Linus B. Comins, Roxbury, Massachusetts; W. L. Underwood, Kentucky.

DELEGATES TO THE NATIONAL EXHIBITION AT RICHMOND. The New York State Agricultural Society has appointed the following delegation to attend the National Exhibition at Richmond: His Excellency Governor King; Hon. W. T. McCoun, President; Hon. William Kelly, Henry Wager, and Secretary B. P. Johnson, Ex-Presidents; George Clark, W. Akenhed, C. S. Wainwright, Samuel Horne and Francis M. Kotch, Esquires.

The Massachusetts Board of Agriculture has appointed as delegates to attend the National Exhibition, His Excellency Gov. Banks, (Chairman of the Board,) and Messrs. Marston, Wilder, Atwater, Sutton, Flint, Brooks and French.

PREMIUMS FOR ESSAYS. The United States Agricultural Society offer their Grand Silver Medal and Diploma for the best essay on each of the following subjects, for publication in the next annual volume of their Transactions.

1. Agricultural Education, including the details of a system for an Agricultural College and Experimental Farm.
2. The best proportions between the value of land and other capital, and between the amount invested in the different departments of a farm, viz; land, labor, stock, implements and manures.
3. Meteorology, in reference to its connection with droughts and floods, with suggestions for anticipating them and guarding against their effects.
4. Concentrated manures, in reference to economy, improvement of land, injurious tendencies, preparation, application, &c.
5. Depth of culture for different soils.
6. On the development of latent properties in soils.
7. New Crops, with their relative profit and the extent to which they should be cultivated.
8. The cultivation of Forest Trees.
9. The construction of Ice-houses for domestic use.
10. Farm Gardens and Orchards.
11. On Agricultural Exhibitions.
12. Agricultural subjects other than the above. The best essay offered.

No essay will be entitled to a premium, unless it shall be considered by the Committee to be of sufficient advantage to agriculture to entitle it to a place in the Transactions of the Society. It is expected that the essays will be founded mainly, (and on scientific subjects, at least partly) on the writer's practical experience and personal observation or investigation—and when other authorities are quoted, distinct reference must be made. The award of superiority to any one essay over others on the same subject, will be made in reference to its probable greater utility to agricultural improvement, as well as to the ability with which the subject is treated. In matters designed to instruct or to guide practical labors, clearness and fulness of details will be deemed a high claim to merit, and next conciseness. Nothing necessary for instruction should be omitted without injury to the value of the instruction.

Essays must be sent in to the Secretary, at Washington, D. C. before the first of December, 1858, and the name of the author must accompany his Essay, sealed up in an envelope, and not to be opened unless a premium is awarded to the writer. It is desirable that in writing the Essays only one side of the paper be used.

THE WHEAT MIDGE. The Executive Committee of the New York State Agricultural Society are collecting facts on the whole history of this insect and its ravages. These facts will be compiled by Dr. Fitch, the able entomologist of the Society, and a report will be prepared which will give a clear view of the remarkable career of the "wheat midge" (weevil as frequently called) its habits and economy, and will form an authentic record of these important facts for reference in all coming time.

AGRICULTURAL ORATORS. Joseph R. Williams, Esq., President of the Agricultural College of Michigan, will deliver the Address at the Fair of the New York State Society, at Syracuse. Ex-Governor Boutwell, of Massachusetts, will deliver the address at the Fair of the New Hampshire State Society, at Dover.

BELGIUM. The "Societe Central d'Agriculture," through its Secretary, Monsieur G've Le Docte, has proposed an exchange of publications with the United States Agricultural Society.

NAPOLÉON III, in a recent address to his Council of State, says:—"The progress of agriculture ought to be one of the objects of your constant care; for upon its improvement or decline depends the prosperity or decline of empires."

THE ST. LOUIS FAIR, on the 6th of September, will probably be even superior to its predecessors. Messrs. Edward Haven & Co., of St. Louis, are well recommended as agents for such exhibitors as may not be able to attend in person. They state that they will be able to have every article as well exhibited and attended to as if the owner were present.

THE PEACH CROP. A correspondent from Philadelphia says that the New Jersey and Delaware peach crop is very short. New Jersey is barren of peaches to what she was a few years ago. Even Delaware, which at one time inherited her profit and fame as a peach grower, is falling into the sear and yellow leaf.

THE ARMY WORM IN LOUISIANA. The army worm has made its appearance in the vicinity of Manchac, where they are spreading rapidly, and at some places eating up everything green, at the rate of ten acres per day. This is the only locality from whence we have had such disastrous news.

A SECOND EDITION OF THE PREMIUM LIST of the Sixth National Exhibition will be issued on the first of October, and will contain some additional premiums to those offered in the edition published on the first of July. Among these will be: Cashmere Goats, pair, 1st premium, \$10.00; 2nd premium, \$5.00. Shepherd's Dog, 1st premium, \$10.00; 2nd premium, \$5.00. Deer, Elk and other rare animals, discretionary premium. Pea Fowls, best pair, \$5.00. Cochin China Fowls, best pair, \$5.00. Mongrel Fowls, best pair, \$5.00. Capons, best two, \$5.00. Mongrel Ducks, best pair, \$5.00. Pigeons, best collection, \$5.00. Tea, best pound, (raised in the United States,) \$5.00. Silk, best display, (made in the United States) \$5.00. Best bag Upland Cotton, (exhibited by grower or his agent,) \$10.00. Best bag Sea Island Cotton, (exhibited by grower or his agent,) \$10.00. Horse Shoes, best dozen, different varieties, \$5.00. Best Heavy Four Wheel Carriage, \$10.00. Best Light Four Wheel Carriage, \$5.00. Best Light Four Wheel Carriage, without top, \$5.00. Best Two Wheel Chaise, \$5.00. Best Trotting Sulky, \$5.00. Best Express Wagon, \$5.00. Best Heavy Double Carriage Harness, \$5.00. Best Light Double Carriage Harness, \$5.00. Best Heavy Single Harness, \$5.00. Best Light Single Harness, \$5.00. Best collection of whips \$5.00. Best Portable Saw-mill, silver medal. Best new implement, never exhibited at a National Fair, (in addition to any other premium it may receive in a class,) silver medal and diploma. Best apparatus for heating country houses, silver medal. Best apparatus for lighting country houses, silver medal. Best candles, bronze medal. Best oil or burning fluid, bronze medal. Best bushel of oysters, \$5.00.

Farm Crops. It has also been decided to give the following premiums for Farm Crops, raised during the present year in the State of Virginia, each on not less than two acres of land. Best crop of Indian Corn, \$10.00; 2nd best, \$5.00. Best crop of Wheat, \$10.00; 2nd best, \$5.00. Best crop of Irish Potatoes, \$10.00; 2nd best \$5.00. Best crop of Sweet Potatoes, \$10.00; 2nd best, \$5.00. Best crop of Tobacco, \$10.00; 2nd best, \$5.00. Best crop of Turnips, \$10.00; 2nd best, \$5.00. Best crop of Sorgho, \$5.00. The land from which the crop for premiums is claimed, must be in one contiguous piece, and must be measured by a competent surveyor, whose affidavit must accompany the statement. The applicant must state, in writing, the location of the land, and the kind and condition of the soil? What was the previous crop, if any, and how that was manured? The quantity and kind of seed? The time and manner of sowing, harvesting and preparing the crop for market? The actual yield, (the statute bushel in grain crops to be used)? This statement must be sworn to before a magistrate, and a fair average sample of the crop must be exhibited.

Fruit Trees. For the best collection of Fruit Trees, under ten years of age, in the State of Virginia, \$20.00; 2nd best, \$10.00; 3d best, \$5.00. Applicants for these premiums must state in writing, the location of their orchards and the kind and condition of the soil; the age, number and varieties of their trees; the amount of fruit produced last year, (estimated) and this year, by measurement. This statement must be sworn to before a magistrate, and a fair average sample of the fruit, when practicable, must be exhibited.

Nurseries. For the best Nursery of Fruit and Ornamental Trees in the State of Virginia, a silver medal. Applicants to state in writing the location and size of their nurseries; the kind and condition of the soil; the manner of cultivation; the age and number of trees exhibited and the retail prices asked for them. This statement must be sworn to before a magistrate.

WOOL. Harrison County, (Ohio) is one of the greatest wool-growing counties in the Union. The Cadiz Sentinel estimates the crop of the county at four hundred thousand pounds, which will sell for one hundred and seventy-two thousand dollars! This is pretty extensive for a county of but four hundred square miles.

STANDARD AGRICULTURAL WORKS. Among the works published or re-published by A. O. Moore, the Agricultural Bookseller, in New York City, are: *Stephens' Book of the Farm*, in two large octavo volumes, forming a complete cyclopedia of English Agriculture, valuable as a book of reference to agriculturalists everywhere—price, \$4.00. *Thaer's Principles of Practical Agriculture*, translated from the German—price, \$2.00. *Randall's Sheep Husbandry*, especially adapted to the Southern States—price, \$1.25. *Stewart's Stable Book*, edited and adapted to this country, by A. B. Allen—price, \$1.00.

THE ILLUSTRATED ANNUAL REGISTER for 1859, will soon be published by Messrs. Luther Tucker & Son, Albany, N. Y. It will contain "Thomas' Essay on Farm Management," re-written, enlarged and illustrated; an illustrated chapter on "Country Dwellings;" a few pages on "Furniture and Rural Structures of iron;" a paper on "Under-draining," accompanied by twenty-nine diagrams; articles on the culture of the Pear, the Peach, the Plum and the Strawberry, with much other useful and interesting information.

AYRSHIRE STOCK. Sanford Howard, Esq., Editor of the Boston Cultivator, has purchased in Scotland, and shipped to this country, six bulls, four cows and fourteen heifers, of the purest Ayrshire breed.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND. The annual exhibition for 1858, which closed at Chester, on Friday, the 25th ult., is said to have been "unprecedented as to the number of exhibitors, the value of the stock and the implements entered, and the number of visitors who entered the show-yard." The *North British Agriculturalist* gives the following summary of the animal Departments:—

"As to the exhibition of stock, the Short Horns, Herefords and Devons have never been excelled as to quality. The sheep were on the whole respectable, but in some of the classes there was an absence of superior animals. The Cotswold sheep was perhaps the best represented of any class as to quality. The horses were very unequal. Several excellent animals were shown; still the collection did not give a favorable impression of the English agricultural and dray breeds; nor did the thorough-bred horse appear to advantage. The pigs as a class could not be surpassed—this applies alike to large and small breeds. The show of poultry was very good as to quality. A greater number would have increased the interest of this department."

The Implement Department was well filled, and it is said that never before have the trials in the field been so thoroughly conducted, nor "the prizes so fairly won." The Steam Plough trial was a feature of the Society's operations, and there were no less than one hundred and five steam-engines for farm-work on exhibition at the Show, leading the *Mark Lane Express* to suggest that the engine be taken as the emblem of Agriculture, and "Get up the steam" be substituted for the old motto "Speed the plough." The premium of £500 or \$2,500 for the best Steam Plough, was awarded to Mr. Fowler's machine, the judges saying:—"From the result of the trials intrusted to our decision, and conducted throughout under our immediate supervision, it is beyond question that Mr. Fowler's machine is able to turn over the soil in an efficient manner, at a saving, as compared with horse labor, of, on light land 20 to 25 per cent.; on heavy land, 25 to 30 per cent.; and in trenching, 80 to 85 per cent.; while the soil in all cases is left in a far more desirable condition, and better adapted for all the purposes of husbandry."

Sanford Howard, Esq., of the *Boston Cultivator*, witnessed this trial, and describes Fowler's Plough as worked with a stationary engine, with anchors and pulleys. It carried six ploughs, three of which worked at a time, a man walking along by the side of the ploughs to keep them at their work properly. The ground was level, the soil a sandy loam, pretty well swarded, and free from stones, but the work was inferior to what a good farmer would require. Mr. Sanford says, at the close of his letter:—

"But on the whole, though the trials at this exhibition demonstrated the practicability of using steam in cultivating the earth, they afforded nothing satisfactory in regard to the *expediency* of using it. In the first place, there is but little land, except in our prairie region, where so few obstructions to steam cultivation or to the progress of the plough exist. The ploughing done here, even the best of it, would be barely passable under any circumstances, and yet it was nothing, comparatively, to plough such ground. Almost anything in the shape of a plough, dragged by a team and guided by a man, could have done as well. But suppose the ground had been all rough, stony, or of a clayey nature, and compacted by the heat and drouth of an American summer—could the steam ploughs have done any good at all? From all that I saw, the answer would be, *no!* Besides, their appeared to be a great expenditure of power, and the usual force required (or used) was proportionately large. One of Howard's Norfolk Ploughs was at work with horses near where the steam machines were tried, and the contrast in work in favor of the "old way" was the subject of universal comment among the farmers. Still, it should not be said that steam ploughing will never be adopted; it is not improbable that it will be, but "the time is not yet." It is, perhaps, the duty of associations to afford full encouragement in regard to the experiments required to effect such modifications as practice only can suggest, and by the aid of which, steam cultivation may be successfully introduced."

The *North British Agriculturalist* is of the same opinion as Mr. Howard, and says in a leading editorial article on the award of the judges on Steam Ploughs:—"While pleased to learn that Mr. Fowler receives some pecuniary recompense for the expense and trouble to which he has subjected himself, we are of the opinion that the apparatus is not in that state in which it can be recommended for purchase, and consequently the unqualified award of the Society may mislead if it is regarded as otherwise than a tribute to the ingenuity, energy and perseverance displayed by Mr. Fowler."

THE NATIONAL EXHIBITION. There is every reason to believe that the Exhibition at Richmond will equal, if not surpass the preceding National Exhibitions, especially in the Horse, the General Utility and the Implement Departments. The premium list is in reality the most liberal ever offered at a National Exhibition, as the entry fees will be greatly reduced, and entirely dispensed with in the Horticultural, Domestic, Product, General Utility and Art Departments. Many articles exhibited in these Departments will necessarily be consumed, and the Grains and Seeds are to be retained for distribution to foreign Agricultural Societies. The revised edition of the premium list, with the names of the judges, the regulations, &c., will be ready on the first of October.

OFFICERS OF THE NATIONAL EXHIBITION.

Chief Marshal and General Superintendent. Col. Charles Dimmock.
Committee of Invitation. Henry A. Wise, William H. Macfarland, John Rutherford, R. Barton Haxall, Abram Warwick, Joseph R. Anderson, H. L. Kent, Thomas R. Price, Trench Tilghman, President of U. S. A. S., and James Lyons, Prest. Virginia C. A. S.
Secretary. Ben: Perley Poore, whose address will be "Office of the U. S. Agricultural Society, Washington," until October 1st, after which time, "Richmond, Va."

OFFICERS OF THE UNITED STATES AGRICULTURAL SOCIETY, FOR 1858.

President. GEN. TENCH TILGHMAN, of Oxford, Maryland.
Vice Presidents. J. D. Lang, of Maine; H. F. French, of New Hampshire; Frederic Holbrook, of Vermont; John Brooks, of Massachusetts; B. B. Thurston, of Rhode Island; S. H. Huntington, of Connecticut; B. P. Johnston, of New York; W. P. Robeson, of New Jersey; David Landreth, of Pennsylvania; John Jones, of Delaware; Odin Bowie, of Maryland; Philip St. George Cocke, of Virginia; H. K. Burgwyn, of North Carolina; C. W. Alston, of South Carolina; Richard Peters, of Georgia; C. C. Clay, jr., of Alabama; M. W. Phillips, of Mississippi; J. D. B. DeBow, of Louisiana; Lucien Buttles, of Ohio; W. L. Underwood, of Kentucky; T. Fanning, of Tennessee; D. P. Holloway, of Indiana; B. F. Edgerton, of Wisconsin; H. C. Johns, of Illinois; J. R. Barrett, of Missouri; Michael Shoemaker, of Michigan; D. L. Yulee, of Florida; Guy Bryant, of Texas; LeGrand Byington, of Iowa; A. P. Bradford, of California; W. W. Corcoran, of the District of Columbia; Manuel H. Ottero, of New Mexico; H. M. Rice, of Minnesota; J. H. Lane, of Oregon; D. Anderson, of Washington Territory; John M. Bernhisel, of Utah; B. B. Chapman, of Nebraska; F. M. Arney, of Kansas.
Executive Committee. Henry Wager, of New York; J. McGowan, of Pennsylvania; Josiah Ware, of Virginia; Frederic Smyth, of New Hampshire; Henry Wilson, of Ohio; John Merryman, of Maryland; James W. Brown, of Illinois.
Treasurer. B. B. French, of the District of Columbia. } Offices at Washington, D. C.
Secretary. Ben: Perley Poore, of Massachusetts.

OFFICERS OF THE VIRGINIA CENTRAL AGRICULTURAL SOCIETY FOR 1858.

President. JAMES LYONS, of Richmond, Virginia.
Vice Presidents. William C. Rives, of Albermarle; William B. Preston, of Montgomery; William H. Macfarland, of Richmond; Philip St George Cocke, of Powhattan, Joseph Mayo, of Richmond; James A. Sedden, of Goochland; G. W. Mumford, of Richmond; Collin Clark, of Gloucester; John Rutherford, of Richmond; Abm. Warwick, of Richmond; Allen T. Caperton, of Monroe; Wm. P. Taylor, of Caroline; Wm. Wist, of Westmoreland; Wm. P. Harrison, of Prince George; James Scott, of Huranua; R. A. Claybrook, of Richmond; H. R. Neal, of Accomac; Oden G. Clay, of Campbell; George T. Yerby, of Northhampton.
Executive Committee. James Lyons, of Richmond; H. C. Cabell, of Richmond; J. L. Davis, of Henrico; George M. Savage, of Henrico; Wm. B. Stanard, of Goochland; Wm. C. Wickham, of Hanover; Hill Carter, of Charles City; Jacob A. Baylor, of Augusta; John A. Selden, of Westover; H. B. Tomlin, of King William; R. Baylor, of Essex; Wm. Allen, of Surry; C. Bruce, of Halifax; Robert Archer, of Richmond; J. W. Ware, of Clark; N. B. Hill, of Richmond.
Corresponding and Recording Secretary and Treasurer. Charles Dimmock, of Richmond.

AMERICAN POMOLOGICAL SOCIETY. The Seventh Session of this National Institution will commence at Mozart Hall, 693 Broadway, in the City of New York, on Tuesday, the 14th day of September next, at 10 o'clock, A. M., and will be continued for several successive days. Among the objects of this meeting are the following:—To bring together the most distinguished Pomologists of our land, and, by a free interchange of experience, to collect and diffuse such researches and discoveries as have been recently made in the science of Pomology; to hear reports of the various State Committees and other district associations; to revise and enlarge the Society's catalogue of Fruits; to assist in determining the synonyms by which the same fruit is known in America or Europe; to ascertain the relative value of varieties in different parts of our country; what are suitable for particular localities; what new sorts give promise of being worthy of dissemination; what are adapted to general cultivation; and especially, to concert measures for the further advancement of the art and science of Pomology.

SALT. The Syracuse (N. Y.) Courier says the product of the Onondago salt springs will this year amount to at least seven millions of bushels, being an excess of nearly a million over any previous year. The highest product heretofore was in 1855, when there were 6,082,888 bushels manufactured. The product this year will fill 1,400,000 barrels, which at \$1.25, will foot up to \$1,750,000.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, SEPTEMBER, 1858.

[No. 8.]

REGULATIONS FOR THE SIXTH NATIONAL EXHIBITION.

The Sixth National Agricultural Exhibition will be held on the spacious Fair Grounds near the city of Richmond, Virginia, on the 25th, 26th, 27th, 28th, 29th and 30th days of October, 1858.

The officers of the United States Agricultural Society and of the Virginia Central Agricultural Society will meet at the President's Office, each morning during the Exhibition, at nine o'clock, to perfect arrangements for the day. The members of the Executive Committees will also meet each afternoon, at three o'clock, for the transaction of business.

GUESTS and DELEGATES will please report themselves at the "Entry Office," where they will find their tickets of admission. On entering the grounds they will find the Committee of Reception at the President's Office, where there will be a Register for their names, with their post-office addresses, and their quarters at Richmond.

MEMBERS OF THE PRESS will obtain tickets and report themselves in the same manner. Every facility will be afforded them to obtain and transmit information.

THE GROUNDS will be in charge of Col. Charles Dimmock, Chief Marshal and General Superintendent, who will appoint a sufficient number of Assistant Marshals for the enforcement of the Regulations of the Society;—a Superintendent (with assistants if necessary) for each Department;—and such other officers as may be required to enforce order and to punctually carry out the programme of each day. Each officer will wear a badge, denoting his position.

THE JUDGES are requested to report themselves at the "Entry Office," where they will find their tickets of admission. On entering the grounds they will register their names at the President's Marquee, where they will meet, each morning during the Exhibition, at half-past eight o'clock. Vacancies will be filled by the Executive Committee, who will endeavor to have each committee composed of gentlemen from different sections of the Union.

The Books of Entries will be delivered to the Judges, by the Secretary, on the morning of the day on which the awards are to be made, with the ribbons which are to denote the premiums, viz: 1st Premium, *Blue ribbon*; 2d Premium, *Red ribbon*; 3d Premium, *White ribbon*; Commendation, *Green ribbon*. Animals or articles thought worthy of "commendation" will be reported to the Executive Committee, who alone have the authority to award Discretionary Premiums in such cases.

No person who is an exhibitor can act as Judge on the class in which he exhibits. And, during the examination of the judges, if any person interferes with them, by letter or otherwise, he will be excluded from the competition. But exhibitors, when *requested*, are expected to make verbal or written statements concerning their contributions.

No animal or article not entered upon the books given them will be examined by the Judges, and they will return those books to the Secretary, with their awards in writing, signed by their chairman. If not satisfied as to the regularity of the entries in their respective classes, they will apply to the Secretary for information; and should there still be any doubt, after examination, or, if any animal or article is of such a character as not to be entitled to exhibition in competition, they will report the facts to the Secretary, for the consideration of the Executive Committee, that such course may be adopted as the case may require.

As one great object of the Society is to collect valuable information upon the subject-matter of the Exhibition, the several committees are requested to gather all the information possible from exhibitors in their classes, and to make their reports *as full as time and circumstances will permit*.

When there is but one exhibitor, although he may show several animals in the same class and order, only one premium will be awarded; that to be first or otherwise, as the merits of the animal may be adjudged; and when the animal is not deemed worthy of a premium, the Judges will, at their discretion, withhold it. An animal entered for exhibition in one class cannot compete for premium in any other, unless regularly entered in each class on the first day of the Exhibition.

Regard will be had to the purity of blood, as established by pedigree, symmetry, size, and general characteristics of the several breeds of animals; and the Judges will make proper allowance for age, feeding, and other circumstances. *They are expressly required not to give encouragement to over-fed animals* in the breeding classes.

The Superintendents of the different Departments will render every possible facility to the Judges in the discharge of their duties; but no displays of horses or cattle, not on the programme, are to be made without the approval of the Chief Marshal and General Superintendent.

EXHIBITORS must make separate entries of each animal and article, paying the required entry fees, (without exception,) and receiving a card designating the *Department*, the *Class*, and the *Number* of the entry. This card must be affixed to the animal or article entered, or nailed near it, for the information of the Judges.

Entries can be made by letter or at the business office in Richmond. The stalls, pens and tables will be allotted in the order of application. No animal or article exhibited can be removed from the grounds until the close of the Exhibition, unless by written permission from the Executive Committee, after having paid all charges; and any premium awarded will be considered *forfeited* if the animal or article to which it was given is removed without this permission in writing.

Every animal and article entered must be placed entirely under the direction of the Officers of the Exhibition. The exhibition of stock in the rings and on the track will take place *precisely at the time specified*; and animals not prepared at the proper time and place, may, at the discretion of the Judges, be ruled out of competition.

Exhibitors must see to the delivery of their contributions upon the Show grounds; and the Societies cannot, in any case, make provision for their transportation, or be subjected to any expense therefor, either in their delivery at, or return from the grounds; but all the expenses connected therewith must, as heretofore, be provided for by the exhibitors.

The Officers of the Exhibition will take every possible precaution for the safe-keeping of stock, &c., on exhibition, after its arrival and arrangement upon the grounds, but will not be responsible for any damage that may occur. They desire exhibitors to give personal attention to their animals and articles, and at the close of the Fair to attend to their removal.

No premium will be awarded to any horse not sound and perfect. The Judges will decide what tests of speed, strength and docility various classes must be submitted to. All *racing* is prohibited.

Exhibitors of *Thorough-bred* stock will be required to furnish detailed pedigrees of the animals to be exhibited, in writing, at the time of making their entries. The standard authority in all cases of pedigree of Horses will be the English Stud Book and the American Turf Register; for Cattle, the English and American Herd Books. Entries must specify the exhibitor's name and post-office address, and the age of the animal offered. No animal to be entered in the name of any other than the *bona-fide* owner, either by himself or his agent. Should it be proven that any deception has been wilfully practised in making entries, the Executive Committee will withhold the payment of premiums awarded upon such representations.

Applicants for premiums on Farm Crops will remember that the land from which the crop for premiums is claimed must be in one piece, and must be measured by a competent surveyor, whose affidavit must accompany the statement. The applicant must state, in writing, the location of the land, and the kind and condition of the soil; what was the previous crop, if any, and how that was manured; the quantity and kind of seed, the time and manner of sowing, harvesting and preparing the crop for market; the actual yield, (the statute bushel in grain crops to be used.) This statement must be sworn to before a magistrate, and a fair average sample of the crop must be exhibited.

Applicants for premiums on Fruit Trees must state, in writing, the location of their orchards, and the kind and condition of the soil; the age, number and varieties of their trees; the amount of fruit produced last year, (estimated,) and this year, by measurement. This statement must be sworn to before a magistrate, and a fair average sample of the fruit, when practicable, must be exhibited.

Applicants for the premiums on Nurseries must state, in writing, the location and size of their nurseries; the kind and condition of the soil; the manner of cultivation; the age and number of trees exhibited, and the retail prices asked for them. This statement must be sworn to before a magistrate.

Fruits and Flowers must be arranged on the tables by nine o'clock, on Tuesday morning. All fruit and flowers offered in competition must have been grown by the exhibitor, and the Judges will withhold premiums where they are not merited. Fruit and flowers once placed on the tables are under the control of the Judges, and cannot be removed until the close of the Exhibition without their permission, given to the Superintendent of the Department in which they are exhibited.

It is expected that *Domestic Productions* and *Domestic Manufactures* are *bona-fide* household

contributions, and not from any factory or store. Any articles made by boys or girls, if worthy of exhibition, will be received and reported upon, but no Exhibitors' Ticket will be given to exhibitors of articles under two dollars in value.

Exhibitors of Implements and Machinery will make all necessary arrangements for *test trials*, when practicable. Medals awarded to machines or implements tried or tested, will have the fact engraved on them, the United States Society having two years since declared: "That for the awards upon the comparative excellence of competing machines, to be of real practical benefit to manufacturers, and more especially to farmers themselves, they should be made only upon the results obtained by thorough working-trial of the same."

In no case will a premium be granted to an implement on exhibition if it be not worthy of such distinction, although it may not have competitors; and in all cases the preference shall be given to those which perform their proposed labor with the greatest reference to economy.

The object of Exhibitions and Trials being to show the *working qualities*, and *not the ornamental appearance* of machines, it is desirable and expected that the competing article shall not be of better quality than the average stock on sale at the warehouse; and if manufacturers desire to exhibit great excellence of workmanship and adornment in their implements, they are requested likewise to enter one of average excellence, with the price of the same attached.

Each exhibitor should prepare, in writing or print, a condensed and lucid statement of the superiority claimed by him for his implement over others of a similar nature, which should be given to the chairman of the jury of awards in his Class, and he should be prepared to exhibit and explain the several points, if so requested. By so doing the labor of the jury will be much lightened, and the inventor or manufacturer be enabled to secure a complete attention to the important features of his machine or implement.

All instruments, machines, utensils, and apparatus intended to be used in the preparation, culture, or seeding of the soil;—in the harvesting, transportation, or manufacture of produce;—or in the various requirements of agriculture;—or in promoting the comfort of agriculturists and of their families, will be admitted to the Exhibition.

SALES may be made by Exhibitors at any time during the Fair, under such regulation as the Executive Committee may prescribe, but the articles sold shall not be removed without the authority of the Executive Committee. Sales by auction must be made by an appointed auctioneer, at such time and under such regulations as the Executive Committee may prescribe.

PREMIUMS.—Exhibitors to whom premiums in plate may be awarded, can make their selections from among the articles exhibited on the ground. The medals will be ready for delivery at the annual meeting of the United States Agricultural Society, at Washington, in January, and can be easily forwarded by Members of Congress, or by express.

CERTIFICATES will be given with each premium, and *Certificates of Merit* will also be awarded by the Executive Committee, upon the recommendation of Committees. Should the receipts warrant, the Executive Committee will also award *Discretionary Premiums* when recommended.

THE GROUNDS at Richmond are commodious and accessible. There are stalls for the exhibition of animals, with halls and tents for the proper display of machinery, products, &c., and a track for trials of speed against time, processions of horses, &c.

A **PROGRAMME** for each day of the Exhibition will appear in the Richmond morning papers, with such additional Regulations for the preservation of order as the Chief Marshal and General Superintendent may deem it necessary to enforce.

EXPERIMENTAL FARM.—The Essex county, Mass., Agricultural Society has recently come into possession of a farm in Topsfield, worth about \$6,000, bequeathed to it by the late Dr. Treadwell. It has been placed in charge of N. W. Brown, who is to occupy it for twenty years from January 1, 1859, under the direction of the President, Secretary, Treasurer, and three of the Trustees. The farm is to be conducted with a view to promote scientific agriculture, by experiments, &c. The occupant is to keep a full record of all transactions on the farm, receipts and expenses of each department, meteorological record, &c., and a yearly statement of the general management. The agreement also stipulates that the Society shall have the right to hold their annual shows on the ground, which they may decide to do, as the farm is quite centrally located in the county.

CANADIAN CROPS.—The Montreal Atlas contains an official statement, from the Bureau of Agriculture and Statistics, of the crops of the present year. It says that returns from twenty-six counties have been received and analyzed. In eighteen of these counties the wheat midge and rust have been very prevalent and the crops seriously injured. The average produce of the whole twenty-six counties is $12\frac{1}{2}$ bushels per acre of winter wheat, and $14\frac{3}{4}$ bushels of spring wheat, showing a deficiency of about 40 per cent. in winter wheat, and 10 per cent. in spring wheat. Never before, in the history of Canada, has so much injury been done by rust as this year.

JUDGES AT THE SIXTH NATIONAL EXHIBITION.

If a sufficient number of the gentlemen appointed on each class are present at Richmond, they will be divided into Sub-Boards, each of which will view and award premiums upon designated portions of the class.

Gentlemen appointed, who may not find it convenient to attend, and who have not already notified the Secretary, will please do so, that the vacancies may be filled.

Class 1.—*Durham Bulls.*

Charles B. Calvert,	Maryland.
Jonathan Thorne,	New York.
R. Acheson Alexander,	Kentucky.
J. K. Marshall,	Virginia.
William Sutton,	Massachusetts.

Class 2.—*Durham Cows and Heifers.*

Paschall Morris,	Philadelphia.
H. K. Burgwyn,	North Carolina.
Arthur Watts.	Ohio.
Richard Peters,	Georgia.
John D. Lang,	Maine.

Class 3.—*Devon Bulls.*

Edward D. Hobbs,	Kentucky.
George Blight,	Pennsylvania.
A. S. Matthews,	Virginia.
John Brooks,	Massachusetts.
Odin Bowie,	Maryland.

Class 4.—*Devon Cows.*

W. H. Sotham,	New York.
J. W. Fairfax,	Virginia.
George Hartshome,	New Jersey.
William C. Wilson,	Maryland.
Le Grand Byington,	Iowa.

Class 5.—*Ayrshire Bulls.*

J. P. Barret,	Missouri.
E. D. Lyon,	Maryland.
J. T. Brown,	Rhode Island.
Henry B. Jones,	Virginia.
B. S. Heming,	Wisconsin.

Class 6.—*Ayrshire Cows.*

Frederick Watts,	Pennsylvania.
William S. Fontaine,	Virginia.
G. D. Hastings,	Connecticut.
George W. Hughes,	Maryland.
John Pope,	Tennessee.

Class 7.—*Hereford Bulls.*

W. G. Lewis,	Massachusetts.
J. R. Emory,	Maryland.
C. M. Clark,	Ohio.
S. T. Stuart,	Virginia.
D. L. Brooks,	Wisconsin.

Class 8.—*Hereford Cows and Heifers.*

John Jones,	Delaware.
H. F. French,	New Hampshire.
Pells Manny,	Illinois.
S. H. Bell,	Virginia.
J. Bancroft,	South Carolina.

Class 9.—*Alderney Bulls.*

Horace Capron,	Illinois.
B. M. Bowdle,	Maryland.
H. W. Clapp,	Massachusetts.
T. D. Mears,	North Carolina.
Robert Mallory,	Kentucky.

Class 10.—*Alderney Cows and Heifers.*

Charles W. Harrison,	Pennsylvania.
A. P. Hatch,	Alabama.
Collin Clark,	Virginia.
J. Contee,	Maryland.
J. J. Cooke,	Rhode Island.

Class 11.—*Grade Cows and Heifers.*

Edmund Ruffin,	Virginia.
H. F. French,	New Hampshire.
L. F. Hardcastle,	Maryland.
B. Gratz,	Kentucky.
W. Gill,	Ohio.

Class 12.—*Native Cows and Heifers.*

Anthony Kimmel,	Maryland.
J. McGowan,	Pennsylvania.
John Porter,	Vermont.
C. W. Burwell,	Virginia.
E. G. Faile,	New York.

Class 13.—*Yoked Working Oxen and Steers.*

Lewis F. Allen,	New York.
James N. Brown,	Illinois.
W. C. Scott,	Virginia.
Joseph Lindsey, sr.,	Delaware.
George W. Graham,	Maryland.

Class 14.—*Fat Bullocks.*

Stephen Brannon,	Kentucky.
Edward Wartman,	Pennsylvania.
C. J. Stovin,	Virginia.
Joseph Newell,	Massachusetts.
William Jessup,	Maryland.

Class 15.—*Fat Cows and Heifers.*

William Patrick,	Virginia.
H. N. Hunt,	Maine.
R. S. Hill,	Maryland.
B. S. Beecker,	New York.
J. R. Cornell,	New Jersey.

Class 16.—*Thorough Bred Stallions.*

W. W. Crump,	Virginia.
W. S. King,	Massachusetts.
J. Ridgely,	Maryland.
T. H. Hunt,	Kentucky.
Benjamin Alston,	South Carolina.

Class 17.—*Thorough-bred Mares.*

Gibson Mallory,	Kentucky.
Charles Duvall,	Maryland.
Allen Dodge,	Dist. Columbia.
C. C. Clay, jr.,	Alabama.
Genery Twichell,	Massachusetts.

Class 18.—*Stallions not Thorough-bred.*

Clement D. Hill,	Maryland.
W. P. Braxton,	Virginia.
N. B. Smith,	Connecticut.
John Lardner,	Pennsylvania.
M. W. Phillips,	Mississippi.

Class 19.—*Mares not Thorough-bred.*

Henry Wilson,	Ohio.
R. W. Williams,	Louisiana.
Charles Lloyd,	Pennsylvania.
James Carroll, jr.,	Maryland.
Albert Aiken,	Virginia.

Class 20.—*Heavy Draft Stallions.*

Moses G. Cobb,	Massachusetts.
W. L. Underwood,	Kentucky.
Jacob Rutledge,	Maryland.
H. Clay Hart,	Missouri.
Richard G. Haden,	Virginia.

Class 21.—*Heavy Draft Mares.*

Charles M. Barras,	Ohio.
Thomas Clark	Maryland.
W. Rogers,	Virginia.
Ezra Forristall,	Massachusetts.
M. Powers,	Pennsylvania.

Class 22.—*Matched horses, pairs, in harness.*

John P. Stockton,	New Jersey.
W. J. Minor,	Mississippi.
Gerard Gover,	Maryland.
G. W. Mowry,	Virginia.
A. B. Greenwood,	Arkansas.

Class 23.—*Roadsters, single, in harness.*

A. Kennedy,	Maryland.
Keene Richards,	Kentucky.
David Leavitt, jr.,	Massachusetts.
R. Tenbrock,	Alabama.
R. Blackwell,	Virginia.

Class 24.—*Saddle horses, under the saddle.*

L. D. Crenshaw,	Virginia.
W. S. Milton,	Kentucky.
T. J. Lee,	Maryland.
W. J. Minor,	Mississippi.
Adin Thayer,	New York.

Class 25.—*Ponies and Horsemanship.*

F. Smyth,	New Hampshire.
Burwell Whiting,	Virginia.
R. Thomas,	Maryland.
L. J. Pope,	Tennessee.
W. D. Stewart,	New York.

Class 26.—*Trotting Stallions tested against time.*

W. H. Brune,	Maryland.
F. W. Eppes,	Virginia.
Frederick Showers,	Pennsylvania.
Willie Baird,	North Carolina.
David Leavitt,	New York.

Class 27.—*Trotting Mares tested against time.*

Samuel Medary,	Ohio.
Robert Gilmor,	Maryland.
W. H. Key,	Alabama.
J. P. Goodwin,	Virginia.
Jason Woodruff,	New York.

Class 28.—*Mules.*

W. A. Harris,	Illinois.
W. Berkely,	Virginia.
Caleb Letten,	Illinois.
W. Webster,	Maryland.
C. H. Childs,	Rhode Island.

Class 29.—*Asses.*

Richard G. Haden,	Virginia.
John N. Hambleton,	Maryland.
A. J. Murray,	Florida.
J. Shelby,	Kentucky.
J. P. Johnson,	Arkansas.

Class 30.—*Long-wooled Bucks.*

Richard S. Fay,	Massachusetts.
M. R. Cockrill,	Tennessee.
C. R. Prischard,	Virginia.
S. W. Worthington,	Maryland.
H. Canfield,	Vermont.

Class 31.—*Long-wooled Ewes.*

Charles H. Tilghman,	Maryland.
Jacob Hite,	Kentucky.
James Buchalew,	New Jersey.
R. Randolph,	Virginia.
J. M. McIntyre,	New York.

Class 32.—*South Down Bucks.*

Aaron Clement,	Pennsylvania.
R. Y. Henley,	Virginia.
S. W. Jewett,	Vermont.
Henry Carroll,	Maryland.
Bazil Duke,	Missouri.

Class 33.—*South Down Ewes.*

R. H. Allen,	Virginia.
J. Exton,	Delaware.
M. Cushing,	Vermont.
J. B. O'Bannon,	Kentucky.
J. Camak,	Georgia.

Class 34.—*Saxon Bucks.*

William Kelly,	New York.
Owen W. Thomas,	Kentucky.
John A. Lancaster, jr.	Virginia.
J. W. Vail,	Vermont.
A. H. Retout,	Louisiana.

Class 35.—*Saxon Ewes.*

R. W. Scott,	Kentucky.
R. J. Gaines,	Virginia.
John Giles,	Connecticut.
George R. Dennis,	Maryland.
D. J. Powers,	Wisconsin.

Class 36.—*Silesian Merino Bucks.*

Charles E. Wethered,	Maryland.
Edmond Hammond,	Vermont.
John A. Scott,	Virginia.
William Gardner,	New Jersey.
Willie Baird,	North Carolina.

Class 37.—*Silesian Ewes.*

M. W. Ransom,	North Carolina.
A. A. Gordon,	Kentucky.
S. E. Edmunds,	Virginia.
J. C. Clark,	Missouri.
Ebenezer Hobbs,	Massachusetts.

Class 38.—*French Merino Bucks.*

W. R. Staples,	Rhode Island.
A. S. Crothers,	Indiana.
O. R. Funsten,	Virginia.
Josiah Newhall,	Massachusetts.
P. O. Herbert,	Alabama.

Class 39.—*French Ewes.*

John B. Dillion,	Indiana.
Thomas Hughlett,	Maryland.
Leonard Clift,	New York.
William Dillard,	Virginia.
J. R. Lawton,	Massachusetts.

Class 40.—*Spanish Merino Bucks.*

B. A. Donald,	Virginia.
W. Hunt,	Ohio.
Charles J. Dupont,	Delaware.
C. C. Hutchins,	New Hampshire.
W. McCully,	Pennsylvania.

Class 41.—*Spanish Merino Ewes.*

G. W. Kendall,	Texas.
Richard C. Tilghman,	Maryland.
H. T. Curd,	Kentucky.
E. L. B. Curtis,	New York.
J. B. Clark,	New Hampshire.

Class 42.—*Live Muttons.*

S. T. Earle,	Maryland.
A. H. Wescott,	Georgia.
Joseph H. Peck,	Dist. Columbia.
B. Steadman,	Ohio.
John Lindsey,	Virginia.

Class 43.—*Slaughtered Muttons.*

Charles Stetson,	New York.
W. H. Macfarland,	Virginia.
David Woelpper,	Pennsylvania.
David Pulsifer,	Massachusetts.
J. Throckmorton,	Kentucky.

Class 44.—*Large Breed Swine.*

J. R. Baldwin,	Missouri.
A. Carrington,	Virginia.
T. L. Lovering,	Vermont.
Samuel H. Clay,	Kentucky.
A. Howe,	Florida.

Class 45.—*Small Breed Pigs.*

Eben Wight,	Massachusetts.
Peter Melendy,	Ohio.
O. Horsey,	Maryland.
S. Hill,	Iowa.
J. W. Dyer,	Virginia.

Class 46.—*Larger Asiatic Fowls.*

D. A. Reese,	Georgia.
William P. Winfree,	Virginia.
A. B. Sandford,	Ohio.
George B. Deacon,	New Jersey.
James Parrott,	Maryland.

Class 47.—*Other Gallinaceous Fowls.*

A. J. Newbold,	Pennsylvania.
M. Dove,	Maryland.
John Furgeson,	Kentucky.
Robert Carter,	Virginia.
F. G. Cary,	Ohio.

Class 48.—*Ducks.*

R. J. Ormsby,	Kentucky.
C. C. Tate,	Virginia.
A. Y. Moore,	Michigan.
J. R. Partridge,	Maryland.
A. Maillard,	New Jersey.

Class 49.—*Geese.*

William M. Bagley,	Virginia.
William Simpson,	New York.
A. Phillips,	Missouri.
Eben. Sutton,	Massachusetts.
E. J. Bird,	Maryland.

Class 50.—*Turkies.*

F. G. Cary,	Ohio.
S. W. Ficklin,	Virginia.
John T. Bate,	Kentucky.
L. Shallcross,	Pennsylvania.
C. T. Keitte,	Rhode Island.

Class 51.—*Guinea Fowls.*

James P. Robin,	Maryland.
Moses Kimball,	Massachusetts.
Jeremiah Porter,	Virginia.
A. B. Sandford,	Ohio.
H. McKenzie,	Alabama.

Class 52.—*Tobacco.*

T. Hardgrove,	Virginia.
H. Oclrichs,	Maryland.
W. H. Blackburn,	Missouri.
Wm. D. Cook,	North Carolina.
Will. Watkins,	Kentucky.

Class 53.—*Flour, Grain, and Corn.*

W. T. McCoun,	New York.
A. B. Davis,	Indiana.
Robert P. Dodge,	Dist. Columbia.
Simon Rublee,	Wisconsin.
David H. Branch,	Virginia.

Class 54.—*Vegetables and Seeds.*

David Landreth,	Pennsylvania.
Simon Brown,	Massachusetts.
Henry Irvine,	Virginia.
Joseph D. Bondurant,	Kentucky.
John S. Gittings,	Maryland.

Class 55.—*Other Staple Products.*

Richard Peters,	Georgia.
W. M. Cary,	Maryland.
Jas. O. Adams,	New Hampshire.
R. J. Gage,	South Carolina.
C. Palmer,	Virginia.

Class 56.—*Fruits.*

Marshall P. Wilder,	Massachusetts.
Lawrence Young,	Kentucky.
Wm. D. Brincklé,	Pennsylvania.
Wirt Robinson,	Virginia.
Wm. Summer,	South Carolina.

Class 57.—*Beverages.*

J. A. Warder,	Ohio.
W. H. Haxall,	Virginia.
S. G. Fisher,	Pennsylvania.
George R. Taylor,	Missouri.
James B. Ricaud,	Maryland.

Class 58.—*Flowers and Floral Designs.*

Mrs. J. Ridgeley,	Maryland.
Mrs. Fred'k Smyth,	New Hampshire.
Mrs. C. C. Clay, jr.,	Alabama.
Mrs. Wirt Robinson,	Virginia.
Mrs. W. Carter,	Missouri.

Class 59.—*Domestic Productions.*

Mrs. Henry Cox,	Virginia.
Mrs. H. G. Otis,	Massachusetts.
Mrs. James H. Wilson,	Maryland.
Mrs. Gibson Mallory,	Kentucky.
Mrs. A. G. Handford,	Wisconsin.

Class 60.—*Domestic Manufacture.*

Mrs. A. G. Brown,	Tennessee.
Mrs. James Lyons,	Virginia.
Mrs. J. McGowan,	Pennsylvania.
Mrs. Charles Dimmock,	Virginia.
Mrs. J. J. Crittenden,	Kentucky.
Miss Sally Lambert,	Virginia.
Mrs. J. H. McHenry,	Maryland.
H. V. French,	Massachusetts.
W. P. Palmer,	Virginia.
W. L. Underwood,	Kentucky.
Randolph Harrison,	Virginia.
J. L. Darlington,	Pennsylvania.
H. A. Tayloe,	Virginia.

Class 61.—*Locomotive Steam Engines.*

B. P. Johnson,	New York.
Thomas Samson,	Virginia.
Sanford Howard,	Massachusetts.
Wm. Duane Wilson,	Iowa.
T. Affleck,	Mississippi.

Class 62.—*Ploughs.*

John A. Porter,	Virginia.
Elisha R. Potter,	Rhode Island.
J. C. Walsh,	Maryland.
H. K. Burgwyn,	North Carolina.
J. S. McCune,	Missouri.

Class 63.—*Rollers, Harrows, &c.*

Charles L. Flint,	Massachusetts.
Robert Dick,	Maryland.
N. B. Cloud,	Alabama.
S. Francis,	Illinois.
B. Harrison,	Virginia.

Class 64.—*Harvesting Machines and Implements.*

Henry Wager,	New York.
Dr. Broadnax,	North Carolina.
Arthur Peter,	Kentucky.
H. Carrington Watkins,	Virginia.
John S. McCune,	Missouri.

Class 65.—*Agricultural Machines.*

S. V. Merrick,	Pennsylvania.
W. J. Watkins,	Virginia.
George E. Riddel,	Delaware.
A. G. Munn,	Kentucky.
S. Cooper,	Massachusetts.

Class 66.—*Agricultural Tools.*

J. H. Frazee,	New Jersey.
Robert Patterson,	North Carolina.
William Dodge,	Maryland.
John Bates,	Ohio.
Peter P. Batte,	Virginia.

Class 67.—*Wagons, Carts, &c.*

W. D. Wallach,	Dist. Columbia.
W. Stavely,	Pennsylvania.
M. T. Goldsborough,	Maryland.
Joseph A. Moore,	Kentucky.
George R. Kalb,	Missouri.

Class 68.—*Household Implements.*

Edward Friend,	Virginia.
J. H. Wallace,	Iowa.
W. W. C. Force,	New Jersey.
S. Ahalt,	Maryland.
John Harris,	Virginia.

Class 69.—*Instruments, &c.*

Henry A. Dyer,	Connecticut.
John H. Kelppart,	Ohio.
W. C. Wilson,	Maryland.
W. Overton,	Virginia.
B. F. Crane,	Missouri.

Class 70.—*Silverware for Premiums.*

Roger A. Pryor,	Virginia.
Walter A. Wood,	New York.
R. McHenry,	Maryland.
C. H. McCormick,	Illinois.
J. P. Ripley,	Georgia.

Class 71.—*Paintings, Maps, &c.*

Luther Tucker,	New York.
L. A. Whiteley,	Kentucky.
J. R. Thompson,	Virginia.
Wm. Van Zandt,	St. Louis.
J. R. Thomson,	Maryland.

Class 72.—*Collections, Minerals, &c.*

Joseph Henry,	Dist. Columbia.
S. Maupin,	Virginia.
A. L. Elwyn,	Pennsylvania.
A. Litton,	Missouri.
J. S. Gould,	New York.

Class 73.—*Farm Crops.*

P. St. George Cocke,	Virginia.
James Galt,	Virginia.
Josiah W. Ware,	Virginia.
Robert B. Bolling,	Virginia.
Wm. O. Allen,	Virginia.

Class 74.—*Fruit Trees.*

James E. Williams,	Virginia.
Hill Carter,	Virginia.
W. W. Gilmer,	Virginia.
E. P. Scott,	Virginia.
N. F. Cabell,	Virginia.

Class 75.—*Nurseries.*

Wm. C. Wickham,	Virginia.
Robert Archer,	Virginia.
Julian Harrison,	Virginia.
W. P. Tate,	Virginia.
Peyton Johnson,	Virginia.

THE NATIONAL EXHIBITION AT RICHMOND, by the United States and the Virginia Central Agricultural Societies, will probably be superior to any of the National Exhibitions previously held. The spacious grounds, which are situated within the city limits, have been put in complete order, and the arrangements have been so perfectly systemized as to insure the punctual observance of the varied programme for each day. In addition to the usual display of animals, implements and products, there will be introductory addresses by the Presidents of the two Societies; Gov. Wise (chairman of the Committee of Invitation) will welcome the invited guests; Gen. Caleb Cushing, of Massachusetts, will deliver an oration; Hon. W. C. Rives will pronounce the valedictory, and gentlemen from various parts of the Union will speak at the banquet. The arrangements are on the most liberal scale, and well worthy of the "Old Dominion."

The revised edition of the Premium List is ready for delivery.

DELEGATIONS TO THE EXHIBITION AT RICHMOND.—It is now certain that a large majority of the prominent Agricultural Societies in the Union, will be officially represented at Richmond by their officers, or by delegations. In addition to the list of delegates published in the last number of the *Bulletin*, we add:

The South Carolina State Agricultural Society.—Col. A. J. Green, Columbia; Dr. J. R. Sparkman, Georgetown; Col. Ben. Allston, Georgetown; Gen. S. R. Gist, Union Village; and Dr. J. A. Metts, Clinton.

The Philadelphia Society for Promoting Agriculture.—Sidney G. Fisher, Samuel Willetts, Charles W. Harrison, Morton McMichael, and D. B. Kershaw, esquires.

AGRICULTURAL FAIRS, (says the *Richmond Dispatch*,) everywhere coming into vogue in this country, and are among the most hopeful signs of an intelligent appreciation by the people of their great interest and of the growing prosperity of the country. This grand movement has become general, we might almost say universal, spreading through East and West, through North and South, in every State, and in almost every county. The beneficial effects of these Fairs in England, where they are an old institution, are seen in the unequalled husbandry, system and neatness of that island garden; and it is said that even in New England, under the improving influence of these associations, the sterile lands have reached a point of productiveness little inferior to the most favored States of the Union. Another great benefit is their favorable influence in uniting the people of a State, and, in National Fairs, like that which is about to be held in this city, of bringing together the people of the different States of the Union, and thereby cementing the bonds of union and good fellowship. At the approaching Festival, a distinguished Massachusetts statesman will address the people of Virginia; and at a late meeting of the Maine State Agricultural Society, a Mississippi statesman, Hon. Jefferson Davis, delivered an address to the New Englanders. This address abounds with manly and patriotic sentiments.

AMERICAN POMOLOGICAL SOCIETY.—The seventh session of this National Association was held at New York city, commencing September 14, continuing four days. A large number of delegates were present from every section of the Union, and the display of fruits was magnificent. The President, Hon. Marshall P. Wilder, in his able address, remarked that: "Since the organization of this Society in 1848, its example has been followed by the establishment of the British Pomological Society in London; the Société Pomologique de Belge, in Brussels; and of other similar organizations located at almost every point of our Union—all working in harmony for the attainment of the most reliable and important results. These are aggregating the experience of the wisest and best cultivators, creating a taste for this useful and divinely appointed art, proving what varieties are suited to each particular locality, and what to general cultivation. These, through the influence of the Horticultural and Agricultural press, are introducing fruit culture from the Canadas to Mexico, and from the Atlantic to the Pacific, bringing its numberless enjoyments within the means of the most humble cottager, and multiplying the luxuries which crown the tables of the opulent. The large, luxurious and abundant fruits in the State of California, in the Territories of Oregon and Washington, already rival, and in many instances surpass these of our older States, indeed of the countries of Europe.

"The transactions of our last session have been published generally by the periodical press of the United States. They were also translated and published in some of the languages of Europe; and your Catalogue has already become a standard in American Pomology. This it should be your object, at each biennial session, to revise, perfect and promulgate, as the best means of preventing those numerous impositions and frauds which, we regret to say, have been practiced upon our fellow-citizens by adventurous speculators or ignorant and unscrupulous venders, who sometimes use recommendations, hastily and injudiciously given, or surreptitiously obtained, greatly to the injury of the purchaser and fruit-grower, to the dealer and nurseryman, and to the cause of pomology."

MONTHLY BULLETIN

OF

The United States Agricultural Society.

Vol. I.]

WASHINGTON, OCTOBER, 1858.

[No. 9.]

AN ENGLISH EXPERIMENTAL FARM.—Mr. Gerard Ralston has sent to the *Baltimore American* an interesting account of a visit to "Rothamstead," the seat of John Bennett Lawes, esq., near Harpenden, about twenty miles from London. About seventy acres of this magnificent ancestral domain is used for scientific agricultural experiments, for ascertaining what are the laws of vegetable growth and nutrition, in order to fully understand how to raise a maximum crop at a minimum expense. It is under the direction of Dr. Gilbert, a celebrated scientific agriculturist and chemist, and for two years past Dr. Evan Pugh, of Westchester, Pennsylvania, has been one of the assistants.

What we first examined (writes Mr. Ralston) was under a glass roof and protected from the winds at the sides by a screen, a number of plants, including the most commonly cultivated cereal and leguminous and root crops, growing in tin vessels, with 40 lbs. of soil each, and the plant issuing at top through a small hole in a glass plate, which is soldered on to the top so as to prevent any evaporation from the soil, except that which goes off through the leaves of the plant. The pot is weighed when the seed is planted, as so also is all the water added during its growth; at the termination of which, the crop is dried and weighed, and the amount of dried matter in it compared with the amount of water evaporated from the leaves. It is found that for every part of dry matter freed, 250 parts of water pass through the leaves, or for every ton of *wheat* or *grass* produced upon a field, 250 tons of water must have been evaporated from the vegetable matter producing it. Or for a field of grass producing 3 tons per acre, 750 tons (about 500 barrels) of water must have passed off from every acre. This points to the cause of the good effect of rain, and the damage of drought—showing the dependance of the farmer upon the seasons.

The grass field shows the effects of different manures upon grass; seventeen lots, of one half acre each, have been under experimentation for the last 4 years. The result shows the natural produce of the ground (which has not been ploughed or sowed for the last 200 years, and which has only natural grasses upon it) is for this year, per acre, 1 ton, 2 cwt., 20 lbs. This is not increased by 2,000 lbs. of saw dust just beside it on another plat. But 14 tons of barn-yard manure per acre produced 2 tons, 7 cwt., 2 qrs. Rye grass, soft broom grass, Bent grass were particularly developed, while worthless grass, as Quaking grass, Dogstail grass, and several weeds, (plaintain, &c.) were either entirely lost or much diminished in quantity. An addition of 400 lbs. of salts of ammonia (the sulphate and muriate of ammonia) per acre gives 1 ton, 15 cwt., 2 qrs., 6 lbs. And mineral salts (sulphates of potash 300 lbs., of soda 200 lbs., of magnesia 100 lbs., and 200 lbs. of boneash, with 150 lbs. of sulphuric acid) give 1 ton, 16 cwt., 1 qr., 22 lbs. Saw dust has no effect on either of the latter, but the latter, on addition of 400 lbs. of ammonia salts, gives 3 tons, 4 cwt., 0 qrs., 4 lbs. The addition of 800 lbs. of ammonia salts gives 3 tons, 7 cwt., 0 qrs., 4 lbs. Other results are equally striking, but the most remarkable fact is the change produced in the quality of the grass by these manurial substances. The saw dust has no effect whatever, either upon the quantity or the quality of the grass. All the substances which give much increase, tend to keep down the weeds. The mineral salts, the sulphates, with phosphates, tend largely to develop the leguminous plants; clover, lotus, lucerne, &c., were here developed in a marked degree. The large increase of ammonia, whether with or without minerals, showed the development of large quantities of the heavier and coarser grasses, as *Dactylus glomerata*, and *Bromus mollis*. These experiments, when carried out with great care and exactness for a series of years, will supply a rich store of information as to the value of different manurial substances for the promotion of different kinds of grasses. Not only are the statistics with regard to crops and manures kept, but small plats are selected in each plat, and in these each kind of grass is planted and the amount weighed, so that the exact relation between the several quantities produced may be recorded.

In the wheat field there are 40 plats, each containing three-tenths of an acre, on which wheat has been grown continuously under different circumstances for the last 15 years. It would be impossible here to enter into the details of these experiments. Several elaborate

papers have already appeared in the journal of the Royal Agricultural Society of England, in which the statistics here obtained are given, and from which conclusions have been drawn that have elicited much discussion, both in England and Germany. It is found that on this soil, which is a rather heavy clay interspersed with chalk flints, the continuous yield without manure is about 18 bushels per acre. The addition of ammonia salts without minerals for 15 years, has at last so far exhausted the mineral constituents in the soil, that the produce by such salts now is not as great as formerly, yet it now gives 30 bushels per acre. The addition of mineral salts, (sulphate of potash 300 lbs., of soda 200 lbs., of magnesia 100 lbs., and bone ash 200 lbs., with sulphuric acid 150 lbs.,) scarcely raises the unmanured plat above its normal amount, (20 to 24 bushels per acre being thus obtained.) But other plats showing the effect of different quantities of ammonia with these minerals are most marked. The addition of 200 lbs. of ammoniacal salts per acre with these mineral salts gives for 1857 (this year, 1858, results being not yet ready) 35 bushels per acre; 400 lbs. of ammoniacal salts with minerals 46 bushels per acre; 600 lbs. of ammoniacal salts with minerals 50 bushels per acre, but this large quantity is liable to fall down, owing to the great development of straw. The great point claimed for these experiments is, that they show that the atmospheric sources of nitrogen (or ammonia) are not "amply sufficient for the purpose of agriculture," as has been contended by some. They also point out the great value of the highly nitrogenised manures, or the Peruvian guanos, &c., &c.

The barley field contains twenty-four plats of one-sixth of an acre each. These have been going on for seven years upon the same land. They also show results corresponding to those just noticed. Unmanured plats about half a crop, (29 bushels;) with 14 tons of barn yard manure a good crop, 51 bushels per acre; mineral manures, (sulphate of soda, potash, and magnesia,) about half a crop, (32 bushels;) super-phosphate of lime, a little more, (33 bushels;) (super-phosphate of lime and sulphates of soda, potash, and magnesia,) yet more, (39 bushels;) nitrate of soda (Chili saltpetre) gives 47 bushels; ammonia salts, about a like quantity, and a mixture of all the minerals (alkalies and phosphates) and ammonia salt, gives 57 bushels per acre; which latter number points to what purely artificial manures are capable of doing. The crop is about double—"two straws are made to grow where but one grew before." It also points to the fact that the crop is not produced by any *one substance*; that no *quack nostrum* or stimulants can be put upon land by which it will be made to produce without all these various constituents applied to get this 57 bushels of barley per acre. If any one of these substances produces an effect it is because the other substances already exist in the soil, ready to act in concert with it. The experiments show that nitrogen and phosphoric acid are most generally deficient in soils; and hence the addition of these substances produces great results; not that *they* alone do it, but because they were the only substances failing in the soil, and without them nothing can be produced. They are but two links in the middle of a chain, without which the chain has no strength, but *they are not the whole chain*, as a superficial observer might be led to suppose.

Other fields are devoted to similar experiments with beans and turnips, which Mr. Ralston visited, and then went to the laboratory. This is a fine building erected by the farmers of England, at an expense of upwards of 7,000 dollars, and presented to Mr. Lawes as a testimonial of his liberality and of his great services in Agricultural Chemistry. It is most admirably fitted up with sand-baths, water-baths, muffle furnaces, &c., &c., drying-rooms, &c., &c., for all the various operations of drying, analysing, &c., &c., of the products of the experimental fields. The different grains and root crops are dried, the amount of ash determined, and put away for analysis. The elaborate system of shelves and cupboards are full of specimens of ash of grain and straw ready for further investigation. An extensive collection of preparations of the different parts of animals, including the fat, the flesh, the bones, the tendons, &c., &c., of all the different organs of the animal body. These had been used in an extensive investigation involving the slaughtering and careful cutting up and weighing of some hundred head of cattle, hogs, and sheep, by which, when taken into connexion with the statistics of food eaten by them, the relative value of the different kinds of food to produce fat, flesh, &c., &c., would be ascertained.

In this laboratory Dr. Evan Pugh has been carefully experimenting to ascertain from whence plants obtain their supplies of nitrogen. They must get it in the form of pure nitrogen gas, of which air contains 78 per cent., or they must get it from compounds of nitrogen, of which the most common are nitric acid and ammonia. From which of all these sources (air or earth, the pure nitrogen gas, the ammonia, or the nitric acid) do plants get their nitrogen? The importance of this question is heightened by the high price of nitrogenous manures. If plants can get nitrogen from the inexhaustible resources of the free nitrogen gas of the air, why not seek to find the circumstances under which it is obtained, and avoid paying for saltpetre, guano and other nitrogenous manures? It must first be decided whether plants are capable of assimilating the free nitrogen at all. The plants experimented upon must be grown in a soil, and an atmosphere, free from nitrogenous compounds, must be evolved with water containing no such compound, and then the plant so

grown analysed, to see if it contain any more nitrogen than the seed contained. To free the soil from nitrogen, it was heated red hot for several hours in an iron muffle, and then washed with pure water for several days, and finally ignited simultaneously with peat, and the ash of the plant to be grown in it. The red hot soil and the red hot ash were then brought into the red hot pot, and well mixed and allowed to cool under a large glass vessel set in sulphuric acid, so that no ammonia of the air could get to the soil. Once cooled down, pure water was added, and the seeds of known weight and per centage of nitrogen were planted, and the whole removed to large glass shades, 3 feet high and 10 inches diameter. These shades rested in grooves filled with mercury at the bottom, so that all communication with the external air was cut off. By aid of bent glass tubes going down into the groove through the quicksilver under the glass shade and raising inside of the vessel, water and air free from ammonia were supplied to the plant. By a complicated system of bottles partly filled with sulphuric acid, and tubes with pumice wet with this acid, the air supplied was purified from ammonia, and by passing a stream of water from a cistern into a close vessel, from which the air only could pass out through a tube leading into these bottles, a constant stream of ammonia free-air is passed to the plant. In this way 18 different vessels are arranged, in which wheat, barley, oats, beans, peas, clover, tobacco, are grown, some with no ammonia, others with measured quantities, to see if a gain takes place by assimilation of nitrogen from the air. The plants to which no nitrogen was given, and which contained no more than that contained in the seed, were only a few inches high; those to which combined nitrogen (sulphate of ammonia) had been given, were 5 to 10 times as high; thus showing that the plant could not grow without the aid of combined nitrogen—in other words, that the nitrogen of air cannot be assimilated. But before this point can be settled with accuracy, the whole crop, the whole soil and the pot must be analysed to see if the entire nitrogen thus found agrees with that in the seed, *plus* what was added. This will take much work yet.

Other points are the gas found in plants. By a simple piece of apparatus the work of getting the gas out of a plant is reduced to that of a few minutes. Quicksilver is made to run out of a vacuum, and this is brought in communication with a vessel filled with water, (that has been boiled to free it from air) in which the plant is placed. The air rushes out into the vacuum with great rapidity, and in ten minutes can be collected. This I saw done. The gas was then analysed and shown to consist of carbonic acid, nitrogen and oxygen, in very different proportions from what is given in the books upon this subject. This method will be very useful for all cases of getting gasses from plants, from fluids, or from animal secretions and excretions. Dr. Pugh has already made some hundred analyses of the gas from plants, and hopes to follow up the investigations when he returns to America.

STEAM TILLAGE.—The following facts (says the *London Times*) are perhaps worth all that has been written in the way of theory:—Mr. Smith, of Woolston, Buckinghamshire farms 110 acres arable of hilly, cold clay, and mixed gravelly clay, with a 7-horse engine and three horses; and by his peculiar method of scarifying, subsoiling, and “baulk plowing,” the soil has become deep, rich, absorbent, and friable as a garden. The ruinous dead fallow is abolished, yet the farm is a pattern of cleanly culture; and without purchasing artificial manures, very heavy yields, both of wheat, barley, pulse crops, and roots, are grown with a regularity and certainty unknown before. But the remarkable circumstance is that, instead of expensive digging or deep horse-plowing being the secret of this abundance, it has been raised by steam tillage, the annual cost of preparing the ground for sowing not having exceeded 11s. per acre, taken on an average of four years. The engine is engaged in cultivation about forty days in a year, and also does his threshing, grinding, cutting, &c. The windlass, wire-rope, anchors, and implements paid for themselves, he considers, in the first season they were used; and both his own experience, and that of other farmers, give an imperial quarter per acre as the extra yield resulting from the system. Mr. Mechi found an increase of at least eight bushels of wheat per acre, on his heavy Essex land, due to the employment of Mr. Fowler’s steam plow, and on a sandy soil near Ipswich, a similar augmentation of produce followed the use of the same machine. There is also abundant practical evidence to fortify all we have urged, on behalf of steam culture, in the experience of the Marquis of Tweedale, in Scotland; Lord Willoughby D’Eresby, in Lincolnshire; Lord Heatherton, in Staffordshire; Baron Rothschild, in Buckinghamshire; Mr. Randall, in Worcestershire; Mr. Williams, in Wiltshire; Mr. Hall, in Essex; Mr. Aveling, in Kent; Mr. Bethell, and Mr. Romaine. Cultivators will not suffer enormous losses of capital in the wearing out of horses, and poor returns of cropping on land unsurpassed in native richness; £600 to £800 outlay will be well invested in steam-tilling apparatus. Proprietors who have capital at command when profit is at stake, and men who would make a business of plowing for hire, will be purchasers of the more costly machinery. But smaller farmers can adapt a plow or scarifier to the present portable engine for a sum varying from £200 to £300—only the price of some six or eight cart horses.

PATENT OFFICE.—The Agricultural Report of the Patent Office for 1857 is nearly printed. A resume of its valuable contents was given in a previous number of the *Bulletin*.

The foundation has been laid of a Propagating House, for cultivating the Tea plant, in the Experimental Garden at Washington city. A portion of this garden, (which has been thoroughly underdrained with tiles,) has been devoted to special experiments with wheat. A collection has been planted of one hundred varieties, collected by Mr. Browne, many of them having been obtained by him from the collection exhibited at the Paris Exposition by the French Minister of Agriculture and Commerce. A duplicate collection was entrusted to the Farmer's High School of Pennsylvania, and a triplicate collection to an officer of an agricultural association at Fredericksburg, Gillespie county, Texas. Some of the new varieties in these collections are described as of remarkable size and beauty of grain. Another portion of the ground has been planted with acorns of the different varieties of native oaks, and with the seeds of other trees.

Dr. Chas. T. Jackson, of Boston, Mass., is engaged in making quantitative analyses of Tobacco soils, and of the ashes of Tobacco plants. The number of soils, sub-soil, and surface soil, which he is to analyze, will be taken from four different localities, viz: two from the Island of Cuba, two from Florida, two from Maryland, and two from Massachusetts, where the best and the poorest tobacco is grown. The ingredients to be ascertained of each of the above named soils to be determined to the nearest hundredth part of the amount of silica, alumina, lime, magnesia, potash, soda, peroxides of iron and manganese, ammonia, sulphuric acid, phosphoric acid, chlorine, nitric acid, carbonic acid, the organic acids taken collectively, and carbonaceous matter contained therein. In determining the ingredients of the ashes taken from each of the plants grown on each of the above mentioned soils, Dr. Jackson is to ascertain to the nearest hundredth part the percentage of silica, phosphoric acid, lime, magnesia, peroxides of iron and manganese, potash, soda, chlorine, sulphuric acid, and carbonic acid contained therein.

Professor J. Lawrence Smith, of Louisville, Kentucky, is engaged in making similar analysis of the Tobacco soils and of the ashes of the Tobacco plants of that State.

Dr. Jackson is also engaged in making analysis of the soil of Florida, adjudged suitable to the growth of sea-island cotton; likewise the nature and amount of coloring matter in the Red Bug, which infests the cotton-plant in that State, with a view to ascertain its adaptation for a dye or pigment.

Reports have been received from Major H. C. Williams, who was sent in July to collect seeds and cuttings of the grapes of New Mexico and Texas, with the view of testing their adaptation to wine-making and table use. Writing from El Paso, in the valley of the Rio Grande, he speaks in high terms of the grapes of that region, which he says are mainly of two varieties, the blue and the white. Of the blue grape he says: "In size of bunches, in size of berries, and exalted sweetness as well as delicacy of flavor, it is unrivalled by any variety in cultivation in the United States. It tastes like the Isabella sweetened with loaf sugar. The white grape is a large delicious grape, preferred by some for the table, but the blue grape is more hardy (as is supposed) and more prolific. The El Paso grapes are already successfully cultivated in Pennsylvania, and if the people of that State can succeed, what can others do who are more favorably situated in soil and climate?" Major Williams will send in samples of plums and *albaricoques*, (apricots,) with seeds of valuable wild fruits and shrubs.

Mr. Robert Fortune, employed by the Patent Office to collect the seeds of the Tea plant in China, has not been heard from since he left England on the 1st of March last. It is apprehended that he has either been detained in some manner by the invasion of the Chinese, or has written and his letters have been lost or miscarried.

Mr. Townend Glover reports from Pilatka, Florida, that he is pursuing his examinations of the insects injurious to orange trees, and that he is experimenting with a solution of guano thrown on the trees with a hand syringe, which he is of opinion will destroy these insects.

AGRICULTURAL PRESS ASSOCIATION.—At a called meeting of agricultural editors, held at New York during the recent Pomological convention, the following officers were elected:

President—H. P. Byram, Editor *Valley Farmer*, Louisville, Ky.

Secretary—Orange Judd, Editor *American Agriculturist*, New York City.

General Committee—Simon Brown, Editor *N. E. Farmer*, Boston; M. C. Weld, Editor *Homestead*, Hartford, Conn.; Joseph Harris, Editor *Genesee Farmer*, Rochester, N. Y.; Thomas Brown, Editor *Ohio Farmer*, Cleveland; J. W. Hoyt, Editor *Wisconsin Farmer*, Madison, Wis.

On motion of Mr. Clift, the above gentlemen were by vote requested to select the most suitable time and place next season, and issue a call for a general Convention of the entire Agricultural and Horticultural Press of the country.

AMERICAN HERD BOOK.—Lewis F. Allen, esq., of Black Rock, New York, advertises that he will issue the fourth volume of this valuable work early in 1859.

THE SIXTH NATIONAL AGRICULTURAL EXHIBITION, which will be opened at Richmond, Virginia, on the 25th instant, will undoubtedly exhibit in profusion the abundance of our land, and reflect honor upon the "Old Dominion," in which it is to be held. For the first time, the United States Agricultural Society will hold its Annual Exhibition in a southern State, and will there (assisted by the Virginia Central Society) endeavor to bring together specimens of the flocks and the herds, the fruits and the flowers, the tools and the implements of American husbandmen, to awaken and to sustain a more general interest in all the departments of agriculture. The grounds have been put in excellent order; capacious tents and pavilions are in readiness for manufactured articles; there is an abundance of stalls and pens for animals, and a long row of elevated seats command a view of a "ring" for the exhibition of horses and cattle. Guests will be publicly welcomed by W. H. Macfarland, esq., of Richmond; an Address will be delivered by the Hon. Caleb Cushing, of Massachusetts; eloquent remarks may be expected at the Banquet by distinguished gentlemen from various sections of the Union and foreign lands; and the Valedictory will be delivered by the Hon. W. C. Rives, of Virginia. There will also be an Agricultural Ball, in honor of the ladies, "who, following in the footsteps of their common mother, have lent the enchantments of grace and beauty to the primitive pursuit of man—a pursuit worthy of their purest devotion, and suited to their cultivated taste."

OFFICERS OF THE EXHIBITION.

Committee of Invitation.—Henry A. Wise, William H. Macfarland, John Rutherford, R. Barton Haxall, Abram Warwick, Joseph R. Anderson, H. L. Kent, Thomas R. Price, Trench Tilghman, Prest. U. S. A. S., and James Lyons, Prest. Va. C. A. S.

Chief Marshal and General Superintendent.—Col. Charles Dimmock.

Aids to Chief Marshal.—William H. Kennon, William H. Richardson, and Wm. H. Smith.

Chief of Police.—E. S. Gay.

Superintendent of Grounds.—E. G. Eggeling.

Marshal of the Exhibition Ring.—W. S. Wood.

Marshal of the Horse and Mule Department.—J. H. McKenzie.

Superintendent of Cattle Department.—J. T. Morriss.

do. *Sheep* do. A. G. Shepherd.

do. *Swine* do. D. P. Howle.

do. *Poultry* do. Lewis Chamberlayne.

do. *Product* do. Jno. F. Wren.

do. *Horticultural and Domestic Department.*—R. A. Williams.

do. *Mechanical* do. Absalem Blackburn.

do. *General Utility and Art* do. J. T. Read.

do. *Ploughing Match.*—Jno. F. Linton.

Forage Master.—B. F. Talley.

Secretary.—Ben: Perley Poore.

Private Secretary to President Tilghman.—Edward G. Dill.

Managers of the Banquet and Ball.—Gov. H. A. Wise, Gen. Trench Tilghman, James Lyons, John Rutherford, Wm. H. Macfarland, Philip St. George Cocke, Joseph Mayo, R. B. Haxall, Ben. Perley Poore, J. R. Anderson, Chas. Dimmock, Wm. F. Ritchie, Thos. R. Price, W. W. Crump, Abram Warwick, H. L. Kent, T. P. August, Wm. B. Stanard, G. W. Munford, Jno. S. Caskie, H. C. Cabell, Wm. H. Lyons, Jno. A. Meredith, Lewis D. Crenshaw, Randolph Barksdale, Robert Caskie, Wm. F. Watson, Jas. Dove, H. W. Fry, Thos. W. Doswell, W. G. Scott, Wellington Goddin, David Watson, Richard Kennon, Wm. H. Richardson, jr., Robt. Archer, jr., Robt. Ridgeway, W. C. Wickham, C. Bell Gibson, Wm. Boulware, Lewis E. Harvie, Jno. A. Selden, Jno. B. Young, Wm. Allen, of Surry, R. Milton Carey, Wm. M. Harrison, H. B. Tomlin, Thos. J. Deane, N. B. Hill, James Beale, J. H. Conway, Thos. H. Ellis, Jas. A. Seddon, Jas. M. Morson, Wm. Warwick, Lofton N. Ellet, P. T. Moore, J. L. Davis, Gustavus A. Myers, Wm. H. Caskie, Randolph Harrison, Edward Mayo, Thos. P. Giles, W. A. Winston, Jno. H. Richardson, Wm. Allan, Sam'l P. Mitchell, P. W. Grubbs, Wm. H. Clark, Jas. A. Caskie, jr.

THE OFFICERS of the United States Agricultural Society and of the Virginia Central Agricultural Society will meet at the President's Office, each morning during the Exhibition, at nine o'clock, to perfect arrangements for the day. The members of the Executive Committees will also meet each afternoon, at three o'clock, for the transaction of business.

GUESTS and DELEGATES will please report themselves at the "Entry Office," where they will find their tickets of admission. On entering the grounds they will find the Committee of Reception at the President's Office, where there will be a Register for their names, with their post-office addresses, and their quarters at Richmond.

MEMBERS OF THE PRESS will obtain tickets and report themselves in the same manner. Every facility will be afforded them to obtain and transmit information.

AGRICULTURAL COLLEGES.—The buildings of the Maryland Agricultural College are in progress of erection, under the personal supervision of President Charles B. Calvert and Dr. J. O. Wharton, the efficient Register. The buildings of the Pennsylvania Farm School will soon be in readiness to accommodate one hundred pupils. A meeting was recently held at St. Joseph, Missouri, at which a memorial to the next Legislature was adopted, asking the establishment of an Agricultural College in that section of the State.

THE OLYMPIC GAMES, which were in existence a thousand years before the Christian era, have been revived by a royal decree of King Otho, the present King of Greece. A "guarantee fund" has been placed at the disposal of the Hellenic government for the re-establishment of the games by a wealthy Peloponnesian named Evangelos Zappas, and they are to be held at Athens, in the old Stadium, which is said to be in such perfect preservation that little repairing is necessary. The time designated is the three first Sundays in October, every fourth year, commencing in 1859, and, in addition to the traditionary athletic sports, there is to be a display of agricultural and industrial productions. Prizes are to be awarded by a committee appointed each Olympiad by the Greek government; they will consist of gold and silver medals, and wreaths of silver leaves and flowers. The medals are to be stamped with the name of the new founder of the games, ("Zappas,") and the number of the Olympiad, and their winners are to wear them at the button-hole, suspended by silk ribbons.

THE AMERICAN POMOLOGICAL SOCIETY adjourned to hold its next biennial meeting at Philadelphia, in 1860, and elected the following officers for the ensuing two years:

President—The Hon. Marshall P. Wilder, of Massachusetts.

Vice-Presidents—S. L. Goodale, Maine; H. J. French, New Hampshire; Samuel Walker, Massachusetts; Fred. Holbrook, Vermont; Stephen H. Smith, Rhode Island; A. S. Monson, Connecticut; Charles Downing, New York; William Reid, New Jersey; Hartman Kuhn, jr., Pennsylvania; E. Tatnall, Delaware; Charles B. Calvert, Maryland; Yardley, Taylor, Virginia; Walter L. Steele, North Carolina; A. G. Summer, South Carolina; Richard Peters, Georgia; Jos. L. Moultrie, Alabama; Dr. M. W. Phillips, Mississippi; Jas. S. Downer, Tennessee; Lawrence Young, Kentucky; A. H. Ernst, Ohio; J. C. Holmes, Michigan; J. A. D. Nelson, Indiana; J. W. Felt, Louisiana; Thomas Affleck, Texas; R. C. Overman, Illinois; N. J. Colman, Missouri; George Worthin, Arkansas; Robert Avery, Iowa; J. C. Brayton, Wisconsin; Simpson Thompson, California; Joshua Pierce, District of Columbia; Edward Hunter, Utah; Amasa Stewart, Minnesota; C. B. Lines, Kansas; William Davenport, Oregon; Hugh Allen, Canada East; James Dougal, Canada West.

Secretary—Thomas W. Field, Brooklyn, N. Y.

Treasurer—Thomas P. James, Philadelphia, Pa.

Executive Committee—The President and Vice Presidents ex-officio; W. D. Brincklé, M. D., Philadelphia, Pa.; T. W. Field, Brooklyn, N. Y.; M. B. Bateham, Columbus, Ohio; L. E. Berckmans, Plainfield, N. J.; F. K. Phoenix, Bloomington, Ill.

HEDGING IN TEXAS.—Thomas Affleck advertises in the Texas papers that he will plant and dress during three years hedges of the *Cherokee Rose*, at \$100 per mile. He writes: "I am by no means wedded to this particular plant, the *Cherokee Rose*, so called, but would be glad indeed to find another better adapted to the purpose. In the *double white mycrophylla* Rose, I think we have one equally as well, perhaps better suited to the stiff black prairie lands, because equally hardy, well-armed, and impervious, yet not so rampant. For rich bottom lands I prefer the so-called *Chickasaw* Rose, which resembles the Cherokee, but with smaller, closer, squatty, evergreen foliage and less rampant habit. Upon the whole, however, the Cherokee may prove the safest, if the experience of hundreds running through a period of fifty years or more in South Carolina, Georgia, Mississippi, &c., goes for anything, and especially considering the thousands of miles of thorough fence of this plant which exist. That it will suit equally well all soils and localities may well be doubted. For the low sea-coast prairie the *Guisachee* or *Weesatchie* will, no doubt, prove to be the better hedging plant. For the thinner and poor upland prairies it is more than probable that the Osage Orange will be the best adapted. I had great confidence in the restive *Cock's-spur Hawthorn* until this season, when it has been almost entirely destroyed by a small insect of the Aphis family, which operates underneath the leaf; and which same insect has been very destructive to the Quince trees. And from dread of this same insect, I say nothing of the *Pyra-cantha* thorn, though as yet no damage has been done. In Western Texas, the *Yucca*, a Spanish bayonet, and the *Opuntia* or Prickly Pear, either separated or mixed together, in the end could, I feel confident, be made to form an impassable barrier. There is a small tree here, of the *Rhameus* or Buckthorn family, called by the name of India-rubber tree, of which, too, good hedges could be made.

THE GRAIN CROP OF EUROPE for 1858 is fully reported in the English papers, from which the following statement has been condensed by the *Boston Journal*:

"In the countries bordering upon the Mediterranean the crop is variously reported, but upon the whole may be regarded as equal to, if not exceeding, an average. Egypt will furnish a full average. Spain and Portugal will not require any supplies from other countries. In Belgium and Holland there is an average crop, while in the Baltic regions, including Northern Germany and Western Russia the yield is below an average, although high prices may induce exports to some extent. In France there is a fair crop of wheat and rye, oats being inferior. The cereal crop of England exceeds the average, and a portion of the extraordinary wheat yield of last year still remains in the hands of farmers, to be added to this year's harvest. Other breadstuffs are somewhat under the average. In Ireland all kinds of produce are abundant, compared with recent years. The wheat crop of Scotland is excellent, other crops being medium, and possibly below. On the whole, the United Kingdom will this year require smaller imports of grain than in ordinary seasons. The supplying power of Central Russia is not yet determined."

AMERICAN STEAM PLOUGH.—The State Board of Agriculture of Illinois offered a premium of \$5,000 for steam ploughs. It was expected that three different inventions would be exhibited and tested at the State Fair; but only one was on the ground. That was Fawke's locomotive steam plough, from Lancaster, Pennsylvania, which excited great interest among the prairie farmers, and performed well. The machine and apparatus, with fuel and water, weigh only about seven tons, and by the use of a drum or barrel-shaped driver, for propelling the locomotive, the difficulty of miring in soft soil, and slipping on hard, smooth ground, is overcome. The steam plough is easily managed, and is described as a cross between a locomotive and a tender, combining the essential elements of both, mounted on two guiding wheels and a huge roller. The prairie ground on which it was tried was baked as hard nearly as a brick, but the engine turned six furrows side by side in the most workmanlike manner.

THE CORN CROPS AT THE WEST—The extremely favorable fall weather has ripened many a field that a month since did not promise to be worth gathering except for fodder. The quantity is not, of course, as large in bushels of ears as it was last year; but there is reason to believe that there will be as many bushels of really sound corn. The *Cincinnati Gazette* estimates that Ohio will not yield in bushels much, if any, over five-eighths of the quantity produced last year, Indiana one half, Illinois and Iowa three-fourths, Kentucky and Tennessee will furnish full crops, and that the grain, in quality, will go far towards making up the deficiency in bulk. This is very encouraging, since it is well known that the oat crop is almost a total failure all over the prairie States.

TEXAN WILD GRASSES.—A correspondent writes that "two species are most esteemed above all others, and greatly sought after by stock. Mesquit grass is found after leaving the low country in great abundance. It is short, very fine and nearly matted, sweet and tender. Cattle, horses, and hogs eat it greedily. Gamma grass is longer, coarser, and more plenty in dry localities. Its value for stock of all kinds is very great, and some graziers prefer it to the mesquit."

PINE TREE CULTURE.—Major Phinney, of Barnstable, Mass., has been very successful in the cultivation of pine trees from the seed. Eleven years ago he planted ten acres of wornout and otherwise useless land, the soil of which was productive of little else than lichens, with seed from the pine cone, and the result is that now he has a vigorous young forest of pines, the average height of which is twenty feet, with trunks from three to six inches in diameter.

CALIFORNIA FRUITS—Some of the fruits exhibited at the California State fair were extraordinary. Among them were a pear weighing four lbs., a bunch of grapes weighing fourteen lbs., an apple weighing two lbs. three ounces, a peach measuring twelve and one-half, and a strawberry six and one-half inches in circumference.

MARK R. COCKRILL, the "Tennessee Shepherd," appeared at the State Fair, at Nashville, dressed in a suit manufactured from wool of his own growth. He had with him a portion of his flock, among them the sheep whose wool took the premium at the World's Fair, at London, in 1851.

AMERICAN TEA.—A Mobile paper states that Mr. D. W. R. Davis, in the vicinity of that city, has been cultivating the tea plant for several years. He has now quite a number of plants in the most flourishing condition, which seed annually.

AGRICULTURAL EXHIBITIONS.—The Secretaries of a large majority of those State and county Societies which have held their Exhibitions this season, have sent newspapers containing reports of them to the United States Agricultural Society. They all appear to have been well attended, and the press, without exception, speaks in high terms of these rural gatherings, where agriculturists meet to exchange practical ideas, and to acquire information as to the most approved plans of cultivation, the best breed of cattle and horses, and the newest inventions in agricultural implements. Secretaries who have not transmitted accounts of the Fairs of their respective Societies to the United States Society will please send them, directed to the *Monthly Bulletin*, Washington city.

PREMIUMS FOR ESSAYS. The United States Agricultural Society offer their grand Silver Medal and Diploma for the best essay on each of the following subjects, for publication in the next annual volume of their Transactions.

1. Agricultural Education, including the details of a system for an Agricultural College and Experimental Farm.

2. The best proportions between the value of land and other capital, and between the amount invested in the different departments of a farm. viz., land, labor, stock, implements and manures.

3. Meteorology, in reference to its connection with droughts and floods, with suggestions for anticipating them and guarding against their effects.

4. Concentrated manures, in reference to economy, improvement of land, injurious tendencies, preparation, application, &c.

5. Depth of culture for different soils.

6. On the development of latent properties in soils.

7. New Crops, with their relative profits and the extent to which they should be cultivated.

8. The cultivation of Forest Trees.

9. The construction of Ice-houses for domestic use.

10. Farm Gardens and Orchards.

11. On Agricultural Exhibitions.

12. Agricultural subjects other than the above—the best essay offered.

No essay will be entitled to a premium, unless it shall be considered by the Committee to be of sufficient advantage to agriculture to entitle it to a place in the Transactions of the Society. It is expected that the essays will be founded mainly) and on scientific subjects, at least partly) on the writer's practical experience and personal observation or investigation—and when other authorities are quoted, distinct reference must be made.

The award of superiority to any one essay over others on the same subject, will be made in reference to its probable greater utility to agricultural improvement, as well as to the ability with which the subject is treated. In matters designed to instruct or to guide practical labors, clearness and fulness of details will be deemed a high claim to merit, and next conciseness. Nothing necessary for instruction should be omitted without injury to the value of the instruction.

Essays must be sent in to the Secretary, at Washington, D. C., before the eighteenth of December, 1858, and the name of the author must accompany his Essay, sealed up in an envelope, and not to be opened unless a premium is awarded to the writer. It is desirable that in writing the Essays only one side of the paper be used.

OFFICERS OF THE UNITED STATES AGRICULTURAL SOCIETY FOR 1858.

President.—Gen. TENCH TILGHMAN, of Oxford, Maryland.

Vice Presidents.—J. D. Lang, of Maine; H. F. French, of New Hampshire; Fred. Holbrook, of Vermont; John Brooks, of Massachusetts; B. B. Thurston, of Rhode Island; S. H. Huntington, of Connecticut; B. P. Johnston, of New York; W. P. Robeson, of New Jersey; David Landreth, of Pennsylvania; John Jones, of Delaware; Odin Bowie, of Maryland; Philip St. George Cocke, of Virginia; H. K. Burgwyn, of North Carolina; F. W. Alston, of South Carolina; Richard Peters, of Georgia; C. C. Clay, jr., of Alabama; M. W. Phillips, of Mississippi; J. D. B. DeBow, of Louisiana; Lucien Buttes, of Ohio; W. L. Underwood, of Kentucky; T. Fanning, of Tennessee; D. P. Holloway, of Indiana; B. F. Edgerton, of Wisconsin; H. C. Johns, of Illinois; J. R. Barrett, of Missouri; Michael Shoemaker, of Michigan; D. L. Yulee, of Florida; Guy Bryant, of Texas; LeGrand Byington, of Iowa; A. P. Bradford, of California; W. W. Corcoran, of the District of Columbia; Manuel H. Otero, of New Mexico; H. M. Rice, of Minnesota; J. H. Lane, of Oregon; D. Anderson, of Washington Territory; John M. Bernhisel, of Utah; B. B. Chapman, of Nebraska; F. M. Arney, of Kansas.

Executive Committee.—Henry Wager, of New York; J. McGowan, of Pennsylvania; Josiah Ware, of Virginia; Frederick Smyth, of New Hampshire; Henry Wilson, of Ohio; John Merriam, of Maryland; James W. Brown, of Illinois.

Treasurer.—B. B. French, of the District of Columbia, } Offices at Washington, D. C.
Secretary.—Ben. Perley Poore, of Massachusetts,

721 MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, NOVEMBER, 1858.

[No. 10.

The Sixth Annual Exhibition of the United States Agricultural Society was held at Richmond, in alliance with the Virginia Central Society, on the 26th, 27th, 28th, 29th, and 30th days of October. The grounds, which are those heretofore occupied by the State Agricultural Society, were described by the experienced correspondent of the *Country Gentleman* as "too small for the present exhibition, yet the best arranged I have ever seen." An ornamental gateway, over which floated the flags of the United States and of Virginia, opened into an enclosure containing eleven acres, bordered with permanent sheds for cattle, sheep, and swine, and wide enough for a covered walk before the stalls and pens. In the centre of each side was a second-story forage loft; large placards showed the location of each distinct breed, and there was an abundant supply of water in different localities. Within these sheds there was a wide gravel walk around the grounds, and others intersected the level green sward, which was tastefully laid out with clumps of trees and of shrubbery. In the centre was a large tent, fitted up like an amphitheatre with rows of seats, and a rostrum for speakers. Grouped around were four halls and four large tents for the horticultural, pomological, farm product, vegetable, domestic, mechanical, implement, and fine art departments. A long row of permanent coops was provided for the poultry. There were sheds for the locomotive engines, and the heavier implements were arranged in classes upon the grass plats. A permanent building, which met the eye of visitors immediately on entering the grounds, was the "headquarters" of the President, and near it was the marquee of the efficient Chief Marshal, with tents for the Press, the Secretary, the Chief of Police, and six others for the use of committees. Connected with the main show-ground was the horse lot, which contained about five acres, and within which was a track of a quarter of a mile in extent. Three sides of this were bordered with permanent sheds containing stalls, and on the other side (that next the main grounds) were ten tiers of elevated seats for ladies. In the centre of these seats was an raised pavilion for invited guests, commanding a view of the whole scene. A fine display of the flags of different nations decked the grounds, and the band of the State Public Guard furnished excellent music. The attendance was small on Tuesday, but increased in numbers on Wednesday and again on Thursday. A severe storm, which commenced on Thursday night, and continued until Saturday, greatly diminished the receipts, but they will defray all expenditures, including the amount of premiums, \$7,464 50. Taking everything into consideration, it may be said that the Sixth Annual Exhibition was a success, and in many respects it was a decided improvement upon any of its predecessors. Larger numbers of animals and of articles have been shown at former exhibitions, but the object of the Society was to secure those of rare excellence, and to exclude everything of an inferior description. This was accomplished by obliging each exhibitor to submit his entry *himself* to the test of a graduated scale of entry fees, which, together with the rates of admission, were fixed by the Virginia Central Agricultural Society.

A detailed report of the Exhibition will be given in the Transactions of the United States Agricultural Society for 1858, with the proceedings of each day, and the names of the honored guests present, among them the representatives of many prominent agricultural associations. Full reports will also be given of the Welcome to Invited Guests by the Hon. Wm. H. McFarland, the Oration by Hon. Caleb Cushing, the Valedictory by Hon. W. C. Rives, the introductory addresses by President Tilghman, and the remarks by Ex-President Tyler, Lord Napier, James Lyons, esq., Hon. B. P. Johnson of New York, Col. B. Allston of South Carolina, Frederick Smyth of New Hampshire, J. D. B. De Bow of Louisiana, Wm. Duane Wilson of Iowa, C. L. Flint and L. Wetherell of Massachusetts, and other gentlemen who participated in the exercises on the grounds, at the banquet, and at the "Farmer's Talk," held each evening at one of the churches in the city.

The cash premiums enumerated below were mostly paid before the government of the United States Society left Richmond—the others will be paid at sight or remitted on presentation of the proper voucher (by mail or otherwise) to Hon. B. B. French, Treasurer U.

S. Agricultural Society, Washington, D. C. The Medals have been ordered from the Mint at Philadelphia, and the Diplomas from the engraver at Boston, and they will be ready for delivery at the next annual meeting of the Society, at Washington city, on the second Wednesday in January, 1859, or they will then be sent by mail or express, as may be ordered. A certificate is also in the engraver's hands, and will be sent by mail, post-paid, to every person to whom a premium of any description has been awarded, as a record of the award. The Secretary will give duplicates of vouchers which may have been lost, when the application is endorsed by Col. Charles Dimmock, Chief Marshal of the Exhibition.

CATTLE DEPARTMENT.—The number of entries was 110, of which 54 were from Virginia. The fine Durhams of S. C. Ludington, of Va.; the Devons of H. J. Stranberg, Oden Bowie, and J. H. McHenry of Maryland; the Ayrshires and Herefords of John Merryman of Maryland, and Thomas Aston of Ohio; the Ayrshires of Wm. C. Wilson of Maryland, and the fine fat cattle from the western part of Virginia, justified the editor of the *Richmond Dispatch* in speaking of the display as "combining a larger number of first class animals than was ever collected together in Virginia."

Durham Bull, three years and over,	1st. S. C. Ludington, Va., "Degalma,"	\$100
do. do. do. do.	2d. S. C. Ludington, "Scipio,"	40
do. do. two years and under three,	1st. O. Bierne, "Oliver,"	50
do. do. one year old and under two,	1st. S. C. Ludington, "Triumph,"	25
do. do. under one year,	1st. S. C. Ludington,	5
do. Cow, three years old and over,	1st. S. C. Ludington, "Mazurka 4th,"	75
do. do. do. do.	1st. S. C. Ludington, "Chance,"	30
do. do. do. do.	S. C. Ludington, "Red Rose,"	diploma.
do. do. two years old and under three,	1st. S. C. Ludington, "Berthia,"	\$40
Devon Bull, three years old and over,	1st. G. B. Dillard, "Romeo,"	100
do. do. do. do.	2d. Alexander Garritt, "Hero,"	40
do. do. two years and under three,	1st. H. J. Stranberg, Md., "Richmond,"	50
do. do. one year and under two,	1st. A. G. Davis, "Tim,"	25
do. do. do. do.	2d. Oden Bowie, Md.,	10
do. do. under one year,	1st. H. J. Stranberg, Md., "Baltimore,"	15
do. do. do.	2d. A. G. Davis, "Jim,"	5
do. Cow, three years and over,	1st. J. H. McHenry, Md., "Dalia,"	75
do. do. do. do.	2d. H. J. Stranberg, Md., "Matilda,"	30
do. do. two years and under three,	1st. Oden Bowie, Md., "Sunshine,"	40
do. do. do. do.	2d. Oden Bowie, Md., "Fuschia,"	15
do. Heifer, one year and under two,	1st. Oden Bowie, Md., "Bride,"	25
do. do. do. do.	2d. J. H. McHenry, Md., "Florence,"	10
do. do. under one year,	1st. H. J. Stranberg, Md., "Beauty,"	15
do. do. do.	2d. J. H. McHenry, Md., "Darling,"	5
Ayrshire Bull, three years old and over,	1st. J. B. Crenshaw, "Mar,"	100
do. do. do. do.	2d. John Merryman, Md., "Monmouth,"	40
do. Cow, do. do.	1st. Peter D. Glenn, "Christmas,"	75
do. do. two years old and under three,	1st. Peter D. Glenn, "Mary,"	40
do. do. do. do.	2d. Peter D. Glenn, "Martha,"	15
Hereford Bull, three years old and over,	1st. Thomas Aston, Ohio, "Fairboy,"	100
do. do. do. do.	2d. John Merryman, Md., "Catalfra,"	40
do. do. one year and under two,	1st. Thomas Aston, Ohio, "Grand Duke,"	25
do. Cow, three years old and over,	1st. Thomas Aston, Ohio, "Duchess,"	75
do. do. do. do.	2d. John Merryman, Md., "Lilac,"	30
do. do. two years and under three,	1st. Thomas Aston, Ohio, "Beauty,"	40
do. Heifer, under one year,	1st. Thomas Aston, Ohio, "Jenny,"	15
Alderney Bull, two years old and under three,	1st. W. C. Wilson, Md., "Prince,"	50
do. do. do. do.	2d. J. H. McHenry, Md., "Reward,"	20
do. do. one year and under two,	1st. W. C. Wilson, Md., "Perry,"	25
do. do. under one year,	1st. J. H. McHenry, Md., "Trump,"	15
do. do. do.	2d. W. C. Wilson, Md., "Richmond,"	5
do. Cow, two years and over,	1st. J. H. McHenry, Md., "Lady 3d,"	75
do. do. do. do.	2d. W. C. Wilson, Md., "Clara,"	30
do. do. two years and under three,	1st. J. H. McHenry, Md., "Jessie,"	40
do. do. one year and under two,	1st. W. C. Wilson, Md., "Ariel,"	25
do. Heifer, under one year,	1st. J. H. McHenry, Md., "Primrose,"	15
do. do. do.	2d. W. C. Wilson, Md., "Empress 2d,"	5
Grade Bull, (discretionary,)	Kuhn & Martin, "Mazeppa,"	15
do. Cow, three years old and over,	1st. S. C. Ludington, "Lady Roan,"	30

Grade Cow, three years old and over,	2d. Crouse & Irvine,	\$15
do. do. two years and under three,	1st. Crouse & Irvine,	20
do. do. do. do.	2d. S. C. Ludington,	10
Native Cow, three years old and upwards,	1st. Crouse & Irvine,	30
do. do. do. do.	2d. John D. Warren,	15
Working Oxen, four years and over,	1st. S. C. Ludington,	50
do. do. do. do.	2d. Crouse & Irvine,	20
do. do. two years and under four,	1st. A. G. Davis,	25
do. do. do. do.	2d. Crouse & Irvine,	10
Driver's premium divided—Mr. Ludington's driver, \$2.50, Mr. Davis's driver, \$2.50,		5
Fat Bullocks, five years old and over,	1st. Crouse & Irvine,	50
do. do. three years old and under five,	1st. S. C. Ludington,	30
do. Cows, five years old and over,	1st. S. C. Ludington,	30
do. do. three years and under five,	1st. Crouse & Irvine,	20
do. Steer, (discretionary,)	S. C. Ludington,	20

HORSE DEPARTMENT.—“The display of Horses,” said the *Richmond Dispatch* of Oct. 27, “is superior and more varied than at any former State exhibition of that noble animal,” nor has there ever been a finer “ring” of thorough-breds shown at any of the National Exhibitions than that in which Otelius, Regent, Revenue, Red Eye, Fly-by-Night, Mazeppa, Prince Albert, Childe Harold, Primero, Ned Fisher, Mangohick, and Telegraph were entered. The trotting-stock, although not numerous, was of a high order of excellence, and there were fine specimens of the Cleaveland Bay and Norman Draft-horse stock. The number of entries was 191, of which 158 were from the State of Virginia.

Thorough-bred Stallions, 4 years old and over,	1st. John Minor Botts, “Revenue,”	\$100
do. do. do. do.	2d. John L. White, “Fly-by-Night,”	40
do. do. do. do.	P. T. Simmons, Md., “Childe,”	diploma.
do. do. 3 years old & under 4,	1st. J. T. A. Martin, “Telegraph,”	\$75
do. do. do. do.	2d. P. T. Simmonds, Md., “Torquator,”	30
do. do. 2 years and under 3,	1st. T. W. Doswell, “Exchequer,”	50
do. do. do. do.	2d. Thos. J. Deane,	20
do. do. 1 year and under 2,	1st. R. V. Gaines, Va., “Navigator,”	25
do. Mares, 4 years old and over,	1st. Thos. W. Doswell, “Nina,”	100
do. do. do. do.	2d. W. C. Scott, “Pauline,”	40
do. do. 2 years and under 3,	1st. John Belcher, “Betsey Red,”	50
do. do. under one year old,	1st. A. M. Braxton, “Mary Washington,”	15
do. do. do. do.	2d. R. V. Gaines, “Nelly Bly,”	5
Stallions not thorough-bred, 4 years old & over,	1st. W. C. Rives, “Emperor,”	50
do. do. do. do.	2d. F. Felton, Md., “Paul Clifford,”	25
do. do. do. 3 years & under 4,	1st. F. Felton, Md., “Ticonderoga,”	30
do. do. do. do.	2d. W. P. Braxton, “Virginus,”	15
do. do. do. 2 years & under 3,	1st. R. A. Willis, “Young America,”	20
do. do. do. do.	2d. J. F. Lewis, “Rob Roy,”	10
do. do. do. 1 year and under,	1st. N. Berkley, “Wabun,”	15
do. do. do. do.	2d. O. F. Peirce, “Timon,”	10
do. do. do. under one year,	1st. John P. Ballard,	5
Mares, do. do. 4 years old & over,	1st. Franklin Felton, Md., “Fanny,”	50
do. do. do. 3 years & under 4,	1st. Richard Wood, “Blanche,”	30
do. do. do. do.	2d. Alex. Kerr, “Fleda,”	15
do. do. do. 2 years & under 3,	1st. C. B. White, “Leisure,”	20
do. do. do. do.	2d. J. B. Quarles, “Judy,”	10
do. do. do. 1 year & under 2,	1st. B. T. Stanley, “Nina,”	15
do. do. do. do.	2d. Wm. Smith, “Helen Philips,”	10
do. do. do. do.	R. B. Haxall,	diploma.
do. do. do. under one year,	1st. W. G. Taliaferro, “Crinoline,”	\$5
Heavy Draft Stallion, four years old & under,	1st. W. B. Sowers, “Morgan Frederick,”	50
do. do. do. 3 years and under four,	1st. G. W. Mowry, “Augusta Morgan,”	30
do. do. Mare, four years old and over,	1st. J. H. McHenry, Md., “Lilly,”	50
do. do. do. do. do. do.	2d. J. H. McHenry, Md., “Snow Drop,”	30
do. do. Geldings, best pair,	N. M. Lee, “John” and “Logan,”	20
Matched Geldings, pairs, in harness,	1st. Allen Dorsey, D. C.,	50
do. do. do. do.	2d. E. J. Burnett,	25
do. Mares, do. do.	1st. E. J. Burnett,	50
do. do. do. do.	2d. C. Y. Morris,	25
Roadsters, Geldings, single, in harness,	1st. J. Brummell, “Barney,”	30
do. do. do.	2d. J. A. Barnes, “Frank,”	15

Roadsters, Mares, single, in harness,	1st. S. Walker, "Lady Morgan,"	\$30
do. do. do. do.	2d. Franklin Felton, "Fanny,"	15
Saddle-horses, Geldings,	1st. G. W. Thomas,	30
do. do. do.	2d. T. F. Wilson.	15
do. do. Mares,	1st. J. B. Oden,	30
do. do. do.	2d. H. E. Peyton,	15
Ponies and horsemanship,	1st. W. T. Miller,	20
do. do. do.	2d. A. Benson,	10
Trotting Stallion, six years old and over,	1st. H. J. Smith, "Kossuth,"	100
do. do. do. do.	2d. Norman Dayton, N. Y., "Kit Carson,"	50
do. do. under six years,	1st. H. W. Blunt, D. C., "Morse Gray,"	75
do. do. do. do.	2d. W. P. Paff, N. Y., "Rip Van Winkle,"	30
do. Mares, six years old and over,	1st. Franklin Felton, Md., "Fanny,"	100
do. do. do. do.	2d. S. Sherar, "Nannie Bell,"	50
Mule, two years old and over,	1st. C. Fisher, "Jim,"	30

SHEEP DEPARTMENT.—The display of sheep was not large, there being but 51 pens entered, of which 38 were from Virginia.

Long-wooled Bucks, two years and over,	1st. Josiah Ware, Va.,	\$30
do. do. do. do.	2d. Josiah Ware,	15
do. do. one year and under two,	1st. Josiah Ware,	25
do. do. do. do. do.	2d. Thos. Aston, Ohio.	10
do. do. do. do. do.	1st. Josiah Ware,	15
do. do. do. do. do.	2d. Josiah Ware,	5
do. Ewes, two years old and over,	1st. Josiah Ware,	30
do. do. do. do. do.	2d. Josiah Ware,	15
do. do. one year and under two,	1st. Thos. Aston, Ohio,	25
do. do. do. do. do.	2d. Josiah Ware,	10
do. do. under one year,	1st. Josiah Ware,	15
do. do. do. do.	2d. Josiah Ware,	5
South Down Bucks, two years and over,	1st. J. C. Jones, Pa., "Prince,"	30
do. do. do. do.	2d. J. C. Jones, Pa., "Rock,"	15
do. do. one year and under two,	1st. Richard France, Md.,	25
do. do. do. do. do.	2d. Richard France, Md.,	10
do. do. under one year,	1st. J. C. Jones, Pa.,	15
do. do. do. do.	2d. J. C. Jones, Pa.,	5
do. Ewes, two years old and over,	1st. J. C. Jones, Pa.,	30
do. do. do. do. do.	2d. R. France, Md.,	15
do. do. one year and under two,	1st. R. France, Md.,	25
do. do. do. do.	2d. R. France, Md.,	10
Saxon Bucks, two years old and over,	1st. J. W. Davidson, "Peter,"	30
Silesian Merino Bucks, two years and over,	1st. S. S. Bradford,	30
do. do. do. do.	2d. W. L. Wight, "Campbell,"	15
do. do. one year and under 2,	1st. S. S. Bradford,	25
do. do. do. do.	2d. W. L. Wight, "Americus,"	10
do. do. under one year,	1st. S. S. Bradford,	15
do. do. do. do.	2d. S. S. Bradford,	5
Silesian Merino Ewes, two years and over,	1st. S. S. Bradford,	30
do. do. do. do.	2d. S. S. Bradford,	15
do. do. one year and under 2,	1st. S. S. Bradford,	25
do. do. do. do.	2d. S. S. Bradford,	10
do. do. under one year,	1st. S. S. Bradford,	15
do. do. do. do.	2d. S. S. Bradford,	5
Spanish Merino Bucks, two years and over,	1st. S. S. Bradford, "Campbell,"	30
do. do. do. do.	2d. W. L. Wight, "Wooster,"	15
do. do. one year and under 2,	1st. S. S. Bradford,	25
do. do. do. do.	2d. S. S. Bradford,	10
do. do. under one year,	1st. S. S. Bradford,	15
do. do. do. do.	2d. S. S. Bradford,	5
Spanish Merino Ewes, two years and over,	1st. S. S. Bradford,	30
do. do. do. do.	2d. S. S. Bradford,	15
do. do. one year and under 2,	1st. S. S. Bradford,	25
do. do. do. do. do.	2d. S. S. Bradford,	10
do. do. under one year,	1st. S. S. Bradford,	15
do. do. do. do.	2d. S. S. Bradford,	5
Best slaughtered Mutton,	Crouse & Irvine,	10

SWINE DEPARTMENT.—But 24 pens were entered, of which 14 were from Virginia, the others coming from Chester county, Pennsylvania, and Baltimore, Md.

Large Breed Boars, two years and upwards,	1st. T. Wood, Pa.,	\$25
do. do. one year and under two,	1st. B. L. Wood, Pa.,	15
do. Sows, two years and upwards,	1st. T. Wood, Pa.,	25
do. do. one year and under two,	1st. B. L. Wood, Pa.,	15
do. Sow and pigs,	1st. A. A. Tanguy, Pa.,	20
do. do.	2d. R. N. Thorn, Pa.,	10
do. Pigs, (discretionary,)	B. Hickman, Pa.,	certificate.
do. do. do.	T. Wood, Pa.,	certificate.
do. do. do.	W. Ashbridge, Pa.,	certificate.
Small Breed Boars, one year and under two,	1st. R. L. Haile,	\$15
do. do. do. do.	Fendall Griffin,	5
do. Sows, do. do.	Fendall Griffin,	15
do. do. do. do.	Fendall Griffin,	5
do. Sow and Pigs,	Fendall Griffin,	20

POULTRY DEPARTMENT.—There were 39 entries, (some of several coops,) of which 21 were of "game" fowl, many of them very fine. The other breeds were not, generally speaking, of pure blood, and on that account did not receive the premiums.

Shanghaes, (discretionary,)	E. P. Odell,	\$2 50
Game, best pair,	Robert Allen,	\$5
do. (discretionary,)	W. S. Edmonds,	3
do. do.	W. G. Dandridge,	3
do. do.	James Duke,	3
do. do.	L. R. Miller,	3
Dominiques, best pair,	Miss McConnell,	5
White Bantams, do.	Miss McConnell,	5
Black Bantams, do.	R. W. Stores,	5
Muscovy Ducks, do.	Mrs. J. D. Lumpkin,	5
Mongrel do. do.	Mrs. Lucy C. Binford,	5
Hong Kong Geese, do.	W. C. Wilson, Md.,	5
Mongrel do. do.	L. N. Paleski,	5
Wild do. do.	W. B. Palmer,	5
Domestic Turkeys, do.	Mrs. John D. Taylor,	5
White do. do.	Mrs. Mary A. Page,	5
Guinea Fowls, do.	Wm. S. Brittain,	5
Pea do. (discretionary,)	T. L. Crouch,	3
Best collection of Pigeons,	W. B. Palmer,	5

FARM AND GARDEN PRODUCT DEPARTMENT.—The display was not large, but embraced fine specimens of the principal staple products of the United States, with some good garden vegetables, and a small show of fruits. There were 68 entries, 51 of them from Virginia.

Tobacco, English shipping leaf,	1st. W. Branch,	\$30
do. Continental do.	1st. J. S. Cobbs,	30
do. Bright manufacturing wrapper,	1st. P. N. Thomas,	30
Potatoes, Irish,	1st. F. Davidson,	5
do. Sweet,	1st. Mrs. Binford,	5
Turnips,	1st. Fendall Griffin,	5
Collection Garden Vegetables,	1st. L. Chamberlayn,	20
do. do.	2d. A. S. Stores,	10
do. Products of shores of Lake Superior.	Jas. S. Ritchie, Minnesota,	diploma.
Ruta Bagas, (discretionary,)	Henry Timberlake,	certificate.
Asparagras, do.	H. J. Smith,	certificate.
Winter Wheat,	1st. C. H. Boughton,	\$10
do.	2d. Tench Tilghman, Md.,	5
Oats,	1st. Mrs. F. Griffin,	5
Shelled White Corn,	1st. J. G. Lumpkin,	5
Oysters,	C. G. Thompson,	5
Fleece Saxony Wool,	J. M. Davidson,	5
Samples of Wool, (discretionary,)	— — — — —,	diploma.
do. Rice, do	B. Alston, S. C.,	diploma.
do. do. do.	J. R. Spartman, S. C.,	diploma.
do. Hungarian grass, do.	Jabez Smith,	certificate.
Collection of Apples,	1st. H. B. Jones,	\$20
do. do.	2d. J. S. Toombs & Brother,	10

Collection of Native Grapes,	1st. Mrs. W. Willis,	\$10
Wine Sap Apples, (discretionary,)	Henry Timberlake,	diploma.
Gooseberries, do.	John Hampson, N. Y.,	diploma.
Sparkling Catawba, "Bogens,"	R. J. Colston & Co.,	bronze medal.
Blackberry Vinegar, (discretionary,)	Mrs. Dr. Lyne,	diploma.
do. Wine, do.	Mrs. C. S. Morgan,	diploma.
Lemon Soda, &c. do.	M. McCormick,	diploma.
Bottled Ale, Porter and Stout, do.	Army & Shinn, D. C.,	diploma.

HORTICULTURAL AND DOMESTIC DEPARTMENT.—There was but a meagre display of flowers of domestic productions, as when the large amount offered in premiums was taken into consideration, but the specimens of female handiwork, taste, and industry were numerous and attractive, making the number of entries nearly 300, of which but 27 were from other States.

Display of exotics,	1st prem. James Guest, Va.,	\$10
do. Hardy plants,	1st prem. James Guest,	10
do. annuals,	1st prem. James Guest,	10
do. do.	2d prem. John Morton,	5
Floral Design,	1st prem. John Morton,	5
do.	2d prem. James Guest,	10
Pair circular hand boquets,	John Morton,	5
Basket boquet for table,	John Morton,	5
Suspended basket boquet,	John Morton,	5
Large boquet,	John Morton,	5
Hams,	1st prem. Mrs. L. C. Binford,	10
do.	2d do. Mrs. H. Cox,	5
Fresh butter,	1st do. Mrs. J. C. Burton,	10
do.	2d do. Mrs. L. C. Binford,	5
Chesse,	2d do. Mrs. A. J. Huffard,	5
Lard,	1st do. Mrs. Timberlake,	5
do.	2d do. Mrs. Z. Benford,	3
Honey,	1st do. C. M. Maddox,	5
do.	2d do. J. W. Johnson, Pa.,	3
Collection of jellies,	1st do. Mrs. E. B. Spence,	5
do. do.	2d do. Mrs. Wm. Willis,	3
do. pickles,	1st do. Mrs. Henry Cox,	5
do. do.	2d do. Mrs. Wm. Willis,	3
Wheat Bread,	1st do. Mrs. J. B. Morton,	5
do.	2d do. Mrs. Cox,	3
Corn Bread,	1st do. Mrs. Lizzie M. Williams,	5
do.	2d do. Mrs. L. C. Binford,	3
Sponge Cake,	1st do. Mrs. R. B. Lyne,	5
do. do.	2d do. Miss J. E. Turpin,	3
Pound do.	1st do. Mrs. Wm. Breeden,	5
do. do.	2d do. Mrs. Dr. Coons,	3
Fruit do.	1st do. Mrs. J. C. Burton,	5
do. do.	2d do. Mrs. W. Willis,	3
Preserves, (discretionary,)	1st do. Mrs. H. Cox,	diploma.
do. do.	2d do. Mrs. L. C. Binford,	certificate.
Dried Peaches, do.	Mrs. J. Gibson,	certificate.
Best ten yards jeans,	Mrs. Martha Hatch,	\$10
do. do. linsey,	Mrs. L. Partlow,	10
do. three ounces flax thread,	Miss E. M. Collier,	5
do. six cuts woolen yam,	Mrs. L. Partlow,	5
do. made fine shirt,	Miss S. M. McFarlan,	5
do. knit woolen undershirts,	Daniel Tally,	5
do. do. do. drawers,	Daniel Tally,	5
do. do. do. stockings,	Mrs. R. C. Howe,	5
do. do. cotton do.	Miss Jennie Smith,	5
do. do. woolen socks,	Mrs. J. Johnson,	5
do. do. cotton do.	Miss Jennie Smith,	5
do. woolen carpet,	Mrs. G. Via,	5
do. white counterpane,	Miss Nancy C. Price,	10
do. do.	Mrs. Hawkes,	5
do. patchwork quilt,	Mrs. M. A. Bohannon,	10
do. do.	Miss Maria Weldon,	5
do. ornamented counterpane,	Mrs. C. Cleveland,	5

Best ornamented table cover,	Miss E. R. Jacobs,	\$5
do. do. hearthrug,	Miss J. Bagby,	5
do. do. chair cover,	Miss Dill,	5
do. do. set of tidies,	Mrs. P. Woolfork,	5
do. do. lamp mats,	Miss A. R. Hooper,	5
do. needle-worked infant's dress,	Mrs. Marius Gilliam,	5
do. do. handkerchiefs,	Miss Tilghman, Md.,	5
do. do. collar,	Miss S. A. Patridge,	5
do. silk embroidery,	Mrs. Dr. Roddy,	5
do. worsted do.	Mrs. S. Caldwell,	5
do. crotchett work,	Miss Mary E. Cooke, N. C.,	5
do. pair of slippers,	Miss Emma Lane,	5
do. ornamental leather work,	Miss Emma Dimmock,	5
do. do. wax work,	Miss J. Turpin,	5
do. do. bead work,	Miss Emma Lane,	5
Silk stockings, (discretionary,)	Mrs. Tally, (aged 70,)	certificate.
Fancy work box, do.	Miss Ella Hubard,	do.
Woolen stockings, do.	Miss Merriman, (knit with one hand,)	do.
Worked piano cover, do.	Mrs. D. Epperson,	do.

THE MECHANICAL DEPARTMENT, (as is the case at the exhibitions of the Royal Agricultural Society of England,) was the largest, the most attractive, and the most useful section of the exhibition. There were 134 entries for premiums, of which Virginia contributed 57, New York 23, Pennsylvania 17, Maryland 8, Ohio 5, Delaware 5, Massachusetts 3, North Carolina 3, Illinois 2, Michigan 2, District of Columbia 2, Rhode Island 2, Maine 1, Vermont 1, New Jersey 1, Tennessee 1, and Alabama 1.

Best locomotive farm engine,	Philip Rahm, Richmond,	grand gold medal.
do. do. (discretionary,)	Ettenger & Edmond,	special diploma.
do. do. do.	Talbott & Brother,	do. do.
Miller's steam-boiler alarm, do.	F. B. Fournier, Ohio,	do. do.
Portable Engine for cutting wood,	Agricul. Steam Engine Co., N. Y.,	silver medal.
Plough for general use, 1st prem.	E. Whitman & Co., Md.,	do. do.
do. do. 2d do.	Sayre & Remington, N. Y.,	bronze do.
do. stubble, 1st do.	R. B. Winston,	silver do.
do. do. 2d do.	George Watt & Co.,	bronze do.
do. sod, 1st do.	George Watt & Co.,	silver do.
do. sub-soil,	E. Whitman & Co., Md.,	bronze do.
do. draining,	A. P. Routt,	silver do.
Collection ploughs, Watt's improvement,	George Watt & Co.,	diploma.
Corn, cotton, and potato plough,	Henry Schreiner,	do.
For ploughing, 1st prem.	Wm. Shepardston,	do.
do. 2d do.	V. H. D. Smither's man William	do.
Harrows, 1st do.	Henry M. Platt, N. Y.,	silver medal.
Corn planters, 1st do.	J. H. Wiggin, Mass.,	silver do.
do. 2d do.	A. P. Routt,	bronze do.
Grain drill, 1st do.	J. D. Willoughby & Black, Pa.,	silver do.
do. 2d do.	Bickford & Huffman, N. Y.,	bronze do.
Broadcast sowers, 1st do.	D. H. Furbush, Maine,	silver do.
do. 2d do.	Bickford & Huffman, N. Y.,	bronze do.
Corn cultivator, 1st do.	Sayre & Remington, N. Y.,	silver do.
do. 2d do.	H. M. Smith,	bronze do.
Horse hoe for drills, 1st do.	Sayre & Remington, N. Y.,	silver do.
Mower and reaper, 1st prem.	T. D. Burrall, N. Y.,	silver medal.
do. 2d do.	R. L. Allen, N. Y.,	bronze do.
Mower, (with Wood's improvement,) 1st do.	W. A. Wood, N. Y.,	silver do.
do. 2d do.	R. L. Allen, N. Y.,	bronze do.
Reaper, (southern reaper,) 1st do.	R. L. Allen, N. Y.,	silver do.
do. 2d do.	Jesse Whitehead,	bronze do.
Revolving rake and reel,	Chas. Dimmock,	diploma and silver do.
Automaton rake, 1st do.	Jesse Whitehead,	do. do.
Horse do. 1st do.	G. B. Griffin, Pa.,	do. do.
Six grain cradles, do.	J. T. Grant, N. Y.,	bronze do.
Threshing machine, 1st do.	Emery Brothers, N. Y.,	silver do.
do. 2d do.	H. M. Smith,	bronze do.
Horse power, 1st do.	Emery brothers, N. Y.,	silver do.
do. do. 2d do.	E. Potts & Co., Pa.,	bronze do.

Governor for horse power,		Lea Pusey, Delaware,	diploma.
Fanning mill,	1st prem.	J. T. Grant & Co., N. Y.,	silver medal.
do. do.	2d do.	J. Montgomery & Co., Md.,	bronze do.
Corn stalk cutter,	do.	J. B. Griffin, Pa.,	silver do.
Corn harvester,	1st do.	R. C. Mauck,	diploma.
do. do.	2d do.	Reamer & Miller,	do.
Brush cutting machine,		E. Seymour, N. Y.,	do.
Shingle machine,	1st prem.	M. P. O. Hern,	silver medal.
do. do.	2d do.	M. Connell,	bronze do.
Models of Ingersoll's hay press,		J. B. Turner,	diploma.
Portable packing saw,		John Haws,	do.
Patent saw gumner,		T. Taylor,	do.
Display of circular saws,		Burgee & Boyle,	do.
Improved mill pick,		W. Brady, Pa.,	do.
Log pump,		Suter & Houcheng,	do.
Cross-cut saw,		B. Grubbs,	do.
Rotary movement,		S. Ingersoll, Conn.,	do.
Machine for making barrels,		O. P. Smith, D. C.,	do.
Improved water wheel,		Robert Baird, Va.,	do.
Grain refiner,		A. F. Porter, Pa.,	do.
Improvement in putting grain cradles together,		J. T. Grant & Co., N. Y.,	do.
Corn and cob mill, "Colman's,"	1st prem.	Church & Fleming,	silver medal.
Portable flour mill,	do. do.	Chas. Ross, N. Y.,	do. do.
Corn husker,	do. do.	S. A. Smith, Mass.,	do. do.
Corn sheller,	do. do.	S. & M. Pinnock & Co., Pa.,	do. do.
do.	2d do.	Thos. D. Burrall, N. Y.,	bronze do.
Hay and straw cutter,	1st do.	G. B. Griffin, Pa.,	silver do.
do. do.	2d do.	Sinclair & Co., Md.,	bronze do.
Sorgho mill,	1st do.	Douglas Brothers, Ohio,	silver do.
Cider mill,	1st do.	H. M. Smith,	do. do.
Tobacco press,	1st do.	Mercer & Coleman,	do. do.
Large platform scales,	1st do.	Jno. Howe & Frank Howe, N. Y.,	do. do.
Small do.	1st do.	do. do.	bronze do.
Farm pumps,		Grain & West, N. Y.,	do. do.
Family coach,		Alfred King,	diploma.
Heavy four-wheel carriage,		Alfred King,	silver medal.
Light do. do.		Alfred King,	do. do.
Light spring-wagon,	1st do.	R. F. Lynch & Bro.,	do. do.
Trotting sulky,		R. F. Lynch & Bro.,	do. do.
Trotting sulky,		H. J. Smith,	diploma.
Horse cart,		E. P. Odell,	silver medal.
Ox cart,		E. P. Odell,	do. do.
Heavy Farm wagon,		D. B. Corrie,	diploma.
Light two-horse wagon,		D. B. Corrie,	do.
Heavy street wagon,		E. P. Odell,	do.
Double Dumping wagon,		D. A. Sutphin,	do.
Self-acting wagon brake, (model,)		R. S. Kellog,	do.
Heavy double carriage harness,		Alfred King,	silver medal.
Light do. do. do.		S. S. Cottrell,	do. do.
Riding saddle and bridle,		S. S. Cottrell,	do. do.
Best collection whips,		S. S. Cottrell,	do. do.
Wheelbarrows,		H. M. Smith,	bronze do.
Bee hive,		J. W. Johnson,	certificate commendation.
do.		A. S. Maddox,	do. do.
Post augurs,		H. M. Smith,	bronze medal.
Jack-screws,		E. P. Odell,	do. do.
Iron railings,		Geo. S. Lownes & Co.	diploma.
Gate latch,		Geo. W. Barker,	do.
Barrels,	best.	Fras. Neidermayer,	do.
do.	second do.	J. T. Bass,	do.
Stoves,		Rathban & Co., N. Y.,	bronze medal.
Hollingsworth's washing machine,		W. H. & B. B. Woodward,	diploma.
Knuckle washing machine,		A. J. Harvey, Pa.,	do.
Bartholf's sewing machine,		D. J. Levy,	do.
Case of clothing,		Tupman & Hull,	do.
Carburet of iron, for stove polish,		Joseph Dixon, New Jersey,	do.

Apparatus for lighting houses, "Sunlight Gas Works,"		Dudley & Holmes, Mich., {	silver medal and special diploma.
Elastic iron railway,		S. A. Beers, N. Y.,	special do.
Apparatus for heating houses,		Dudley & Holmes, Mich.,	silver medal.
Warren's roofing,		John Viles,	do. do.
Hand-loom, (plantation loom,)		W. H. Holliday,	do. do.
Kedzie's water filter,		Jas. Terrey & Co., N. Y.,	do. do.
Old Dominion coffee pot,		Arthur Bernon & Co.,	do. do.
Sewing machines, (Wheeler & Wilson's,) 1st.		E. H. Craig,	do. do.
do. do. (Singer's,) 2d.		A. G. Butterfield,	bronze do.
Butter worker,		Ellison Yerby, D. C.,	do. do.
Refrigerators,		North, Chase, & North, D. C.,	do. do.
Washing machines,		A. A. Huffner, Md.,	do. do.
Sausage meat cutter,		J. W. Vincent, R. I.,	do. do.
do. stuffer,		H. M. Smith,	do. do.
Brooms,		W. D. Cook, N. C.,	do. do.
Self-ventilating milk pan,		Arthur Bernon & Co.	diploma.
Patent carpet sweeper,		E. Shaler & Co., N. Y.,	do.
Ice dish and butter cooler,		C. A. McEvery & Co.,	do.

ART AND GENERAL UTILITY DEPARTMENT.—There were 74 articles entered in this department, 61 from Virginia, but very few of them could compete for the premiums offered, and others were of such a nature that the society had no opportunity of submitting them to that practical test which alone can warrant the bestowal of a diploma.

Surveyor's compass,		Rich'd Patten, Md.,	silver medal.
Barometer,		J. Kedsie, N. Y.,	do. do.
Dynamometer,		Emery & Co., N. Y.,	do. do.
Medicine chest for farm use,		Fisher & Winston,	bronze do.
Double barrelled gun,	1st prem.	S. Sutherland,	silver do.
do. do.	2d do.	S. Sutherland,	bronze do.
Single do.	2d do.	S. Sutherland,	do. do.
Rifle, (with special diploma,)	1st do.	Sharpe's Arms Co.,	silver do.
Rifle,	2d do.	S. Sutherland,	bronze do.
Tools for die-cutting,		H. M. Moses,	diploma.
Oil pictures of animals,		E. Troye, Kentucky,	silver medal.
Maps of an estate,		W. F. Pleasants,	do. do.
do.		A. G. Ware, Tenn.,	bronze do.
Architectural designs,		John R. Hall, Mass.,	silver do.
Plan of a granary,		James T. Worthington, Ohio,	bronze do.
Paintings of shells,		Peter Baumgras,	special diploma.
Painting,		Miss M. A. Hughes,	do.
Crayon drawing,		Miss N. C. Brown,	do.
Ornamental penmanship,		J. S. Duncan, Pa.,	special do.
Engraved models of penmanship,		P. Duff, Pa.,	do.
System of book-keeping,		do.	do.
Lyons' patent penholder,		T. Kenton Lyons,	do.
Engraving, initial stamping, &c.,		H. M. Moses & Co.,	do.
Minerals of Virginia,		Charles Dimmock,	silver medal.
do. any other State,		O. Hendrick,	bronze do.
Specimens of Kanawha coal,		Thomas L. Brown,	diploma.
do. do. salt,		Thomas L. Brown,	do.
do. Rockbridge marble,		A. P. Vignesney,	do.
do. coal,		Colston & Co.,	do.
Orchards under ten years of age,	1st prem.	Louis Tudor,	\$20

REPORTS OF COMMITTEES.—The following extracts from the Reports of Committees are published by order of the Executive Committee, and the awards therein recommended are confirmed.

Special Committee on Herds.—"The committee state without hesitation that no one of them has ever before seen a finer display of cattle, as far as quality is concerned. They award a Special Diploma to S. C. Ludington, of Lewisburg, Va., for the finest Herd of Durhams, animals of very superior character. A Special Diploma to H. J. Stranberg, of Brookletts, Md., for the best Herd of Devons, ten in number; with Diplomas to J. Howard McHenry, of Pikesville, Md., for his Herd of five, and to Oden Bowie, of Md., for his Herd of six—all being beautiful animals. A Special Diploma to Thomas Aston, of Elyria, Ohio, for the best herd of Herefords, fine animals, brought from the southern shore of Lake Erie by their enter-

prising owner. Special Diplomas to J. H. McHenry and W. C. Wilson, of Baltimore, Md., for their fine Herds of Alderneys, each five in number, and equally worthy of high commendation. Mr. Ludington exhibited with his herd a Durham steer, 2 years and 8 months old, the weight of which is 2,000 pounds."

Committee on Thoroughbred Stallions.—"The committee desire to state that 'Red Eye' was ruled out, as not thoroughbred, otherwise he would have unquestionably have received one of the prizes. Neither were they satisfied with the pedigree of 'Regent,' a horse of fine appearance."

Committee on Harvesting Machines.—"The committee report that many very valuable implements were presented before them for examination, and that they have given all the attention which the time allotted them would permit. Eight combined machines for reaping and mowing were entered, one of which 'Wood's Manny' was entered for exhibition only, having received the Gold Medal at the Syracuse trial of reapers in 1857, and is, in the judgment of the committee, fully entitled to the position it then occupied. Two mowers were entered for premium—and one, C. Aultman's 'Buck Eye' Mower, for exhibition only, it having received the Gold Medal at Syracuse in 1857. Two reapers were entered for premium—and one for exhibition, 'McCormick's' reaper, to which the Gold Medal was awarded at the trial at Syracuse in 1857, and which still maintains the high position then assigned it.

"In announcing the premiums awarded to the machines which entered into competition, the committee desire to state that the examinations made by them, (without that trial which is so important to determine the true value of a machine,) have not been as satisfactory as they would have been had there been a trial in the field. They have however considered, from the best evidences before them, the relative merits of machines most of which have a deservedly high reputation. The reaper exhibited by Mr. Whitehead has some points which, when perfected, may make it equal to any other machine, and the revolving rake and reel invented by Charles Dimmock, is worthy of especial attention. The improvement in putting grain cradles together, by which the whole arrangement is simplified, is a new and valuable invention."

Committee on Agricultural Machines.—"The large and small Platform Scales made under the Ross & Strong patent, and exhibited by John Howe, of Brandon, Vermont, and Frank E. Howe, of 438 Broome street, New York, were carefully examined by your committee. These scales, from their simplicity of construction, seem to require some further notice than the mere award of a medal. The Six Ton scale on exhibition, when balanced by the adjusting ball, was tested by one of your committee being weighed, and afterwards being weighed upon one of the small scales selected at random from a number exhibited, when there was no perceptible difference in their indications of weight. The scales were then tested by placing one sealed weight of 50 lbs. upon its platform and tested. Two more were then added, and then additional ones, up to twenty sealed 50 lbs. weights, placed upon different parts and corners of the platform, and in every instance correct weights were indicated. The floor platform was then sufficiently removed to afford an examination of its mode of construction, which it is hardly necessary here to describe, but it is quite enough to say, that your committee were unanimous in their opinion, that the important point of simplicity of construction as well of correctness of weight had been attained. A sliding vernier is also used to subdivide the divisions of 5 pounds upon the beam into pounds. Your committee therefore award to the Messrs. Howe the first premium, a silver medal, for the large platform Hay Scale, and the first premium, a bronze medal, for the portable scale."

Special Committee on "Sun-Light Gas Works."—"The special committee on the 'Sun-Light Gas Works' of Dudley & Holmes, Detroit, Michigan, report that they deem the construction of the retort, with its spiral column, presenting a large heating surface in a small space, and the annular space for purification, superior to any which has fallen under their observation. The arrangement for 'burning out' the retort, by which the residuum left in the retort is removed and the durability of the same secured, also presents advantages not possessed by other apparatus. The light shown was superior to either coal or rosin oil gas, being made of good sperm oil. In the absence of any opportunity of comparing the works with others, we decline expressing any opinion of superiority. But for the merits of the apparatus as presented above, we recommend, in addition to the premium which may be awarded, a special diploma."

TRIUMPHAL PROCESSION.—The locomotive farm engine, manufactured by Philip Rahm, of the Eagle foundry, Richmond, to which was awarded the Grand Gold Medal of Honor, at the Sixth National Exhibition, was escorted from the Fair grounds by the numerous workmen of the establishment, with music and banners. An engraving of this premium engine will appear in the volume of Transactions for 1858.

BACK NUMBERS of the *Monthly Bulletin* furnished, to complete sets.

THE EXECUTIVE COMMITTEE of the United States Agricultural Society was in session at Richmond during the exhibition, and until the evening of the following Tuesday, when it adjourned to the Society's Rooms at Washington, and after sitting there on Wednesday, Nov. 3d, adjourned to meet on the second Monday in January, 1859, two days prior to the annual meeting. Present, President Tilghman, Messrs. Henry Wager, J. McGowan, Josiah Ware, Frederick Symth, Henry Wilson, and John Merryman, and Secretary Poore. The greater portion of the business transacted related to the Exhibition, but the following resolutions were ordered to be published:—

Resolved, That the thanks of the Government of the United States Agricultural Society be presented to Col. Charles Dimmock, of Richmond, Chief Marshal and General Superintendent, for his services, his courtesy, and his endeavors to promote the success of the Sixth Annual Exhibition.

Resolved, That the thanks of the Government of the United States Agricultural Society be presented to the Honorables Caleb Cushing, W. C. Rives, and W. H. McFarland for the addresses delivered by them at the Sixth Annual Exhibition, and that copies of the same be requested for publication in the volume of Transactions.

Resolved, That the regulation by which, "when there is but one exhibitor, although he may show several animals in the same class and order, only one premium will be awarded, to be first or otherwise, as the merits of the animal may be adjudged," is suspended during the present Exhibition, with the positive understanding that it will be strictly enforced hereafter.

Resolved, That the Executive Committee of the United States Agricultural Society deem the system of Horse Taming, advocated and practised by Professor Rarey, worthy of the attention of all those interested in that subject.

Resolved, That the thanks of the Government of the United States Agricultural Society be presented to the editors and reporters of the *Richmond Dispatch*, the *Richmond Enquirer*, and the *Richmond Whig* for their valuable aid in promoting the success of the Exhibition, and to all other editors and reporters who have given it publicity.

Resolved, That the thanks of the Executive Committee be presented to Mr. J. P. Ballard, of the Exchange Hotel, for his attention and liberality during their stay in Richmond, and his exertions to promote their comfort.

Resolved, That after the close of the present year, the "Transactions" of the United States Agricultural Society be published in monthly parts, in connexion with the "Bulletin," and distributed gratuitously to Annual as well as to Life Members.

FARMER'S HIGH SCHOOL OF PENNSYLVANIA.—The Germantown Telegraph states that the west wing of this institution will be completely finished in time for the intended opening in February next. This wing comprises one-third of the entire college structure, and contains 63 chambers, 9 by 17, five class-rooms, 20 by 20, a dining-room and lecture-room, each 20 by 40, large halls and roomy corridors, wash and bath-rooms and closets on each story, and a complete private residence with separate halls and entrances. The whole will be supplied with water, ventilation, and temperature by the most convenient and most reliable arrangements known to modern architects. Mr. C. B. Callahan, a well-known professional architect, has superintended the construction with assiduous attention, and takes commendable and natural pride in securing to this noble structure all the perfection of detail and finish which his long experience enables him to bestow. The building committee of the board of trustees have sacrificed private business and personal comfort, as well as time and private means, to the great object of completing the work, and rendering it in all respects substantial, secure, and perfect in finish and adaptation. Besides this they bear the heavier care of the *organization* of the institution for its novel and varied service, a task involving immense difficulty. In all this they bear their own expenses, and have at the same time been among the most liberal contributors to the treasury.

The improvements on the School Farm continue to be prosecuted vigorously. Large orchards, some miles of hedging, extensive nurseries, avenues, and sheltering belts, have been planted and thoroughly cultivated, and there is already a considerable stock of hardy trees and plants in the nurseries, of saleable size, and of admirable thrift and vigor. The strong, dry, free soil and elevated situation are eminently favorable for the growth of hardy trees. They are robust, but not tenderly luxuriant; they ripen their wood early, and will readily recover growth after transplanting. The usual farm crops have been good. More than one-half of the labor expended on the farm has been the clearing up of fence-rows, sprouts, grubs, stumps, and stones, and on more than one-half of the farm, all impediments to the processes of thorough cultivation have been carefully removed.

In the experimental department, one hundred and ten distinct varieties of wheat, (presented by D. J. Browne, esq., of the Patent Office,) have been sown this season, and very many varieties of other grains, roots and grasses. The collection of fruits is probably the largest in the State. Various manures are on trial, especially those which have been found

to stimulate the growth and early ripening of wheat. A large variety of implements, and different modes of culture are also on trial, and, in all, there are now one hundred and ninety-three distinct field experiments instituted and registered in the record of experiment. In the rows of didactic culture, for illustration to students, the various modes of culture will be compared side by side, both with the best usual culture, and with *no culture*.

An impression is abroad that the farm is not adequately supplied with water. It is enough of correction to this mistake to say, that during the extremely dry weather and low water of last month, a well supplied—at 21 feet below the natural surface—abundant water for the use of several families, and for a very large force of plasterers and masons, who alone consumed 70 barrels on the 27th. The water is of mild and excellent quality. In one of the quarries there is a living spring at about 12 feet from the surface, and another in the shades of the arboretum will afford an eligible location for an out-door bathing pond, if desired. The college will be supplied abundantly with pure, soft water, on each of the seven floors, as well as with well water. The barn cisterns continue to supply all the stock and much more. The shop, steam boiler, and plant pit are amply and conveniently supplied by a pump in the boiler shed.

Positive arrangements and conditions for the admission of students and organization of the institution, cannot be fully matured or published before the next meeting of the board of trustees, which it is expected will be held in the early part of December.

The annual report of the President of the Board of Trustees, will be published about New-Year, or at the opening of the session of the Legislature, and will contain a full inventory and detail of all operations on the farm, with contributed papers on special subjects of culture, prepared by leading culturists specially for it. A copy will be forwarded, if possible, to the address of every subscriber and contributor.

The citizens of a few counties have subscribed over \$10,000 in part of the necessary contributions towards \$25,000, which *must* be raised by individual subscription. These subscriptions are due November 1, 1858, and May 1, 1859, and the duplicates are now in the hands of gentlemen who will attend to the collections. Farther subscriptions are urgently needed, and should be made payable April 1, 1859.

SEVENTH ANNUAL MEETING.—The United States Agricultural Society will hold its Seventh Annual Meeting in the Lecture Room of the Smithsonian Institution, at Washington city, on Wednesday, the twelfth day of January, 1859, when the election of officers will be held, and the business required by the constitution of the Society will be transacted.

Officers and Members of the Society are respectfully notified to attend, and a cordial invitation is extended to State and other Agricultural Associations to send Delegates, that there may be a general representation of Agriculturists "in Congress assembled," to protect and sustain their interests, acting as a national organization on such matters pertaining to Agriculture as may be deemed appropriate. Gentlemen from other lands who may be interested in the acquisition and diffusion of Agricultural knowledge, are also invited to attend, and to participate in the proceedings.

The Medals and Diplomas awarded at the Sixth Annual Exhibition at Richmond, will be delivered to successful competitors, or their agents. The published volume of Transactions for 1858, will be delivered to Members of the Society, and to gentlemen connected with the Agricultural Press.

Important Agricultural topics will be publicly discussed, after introductory remarks by eminent scientific and practical agriculturists. Gentlemen having other topics pertinent to the advancement of Agriculture, which they may wish to introduce or to have discussed, will please refer them to the Executive Committee, through the Secretary, that a place may be assigned them on the daily programme.

Propositions from cities at which the next Annual Exhibition of the Society is desired, will be received and considered.

The Business Office of the Society is in Todd's Marble Building, one door west of Brown's Hotel, Pennsylvania avenue, where all interested in the cause of Agricultural improvement are invited to call when in Washington city. A large number of Agricultural newspapers, periodicals and reports, (liberally contributed,) are placed on file for public inspection, and the Library is also free to all who may desire to examine it. Models or Drawings of Agricultural Implements, and other objects of interest, are placed on exhibition without charge.

Gentlemen who may wish to become Life Members of the Society, can do so by paying or remitting ten dollars to the Treasurer, Hon. B. B. French, Washington city. This will entitle them, without any further payments, to the full privileges of membership—among these are: free admission to all exhibitions of the Society, the annual volumes of published Transactions, the Monthly Bulletin, and the large and elegant Diploma. The fee for Annual Membership is two dollars, which ensures the receipt of the Transactions and the Monthly Bulletin for one year.

 Editors are requested to call attention to the above announcement.

MONTHLY BULLETIN

OF

The United States Agricultural Society.

VOL. I.]

WASHINGTON, DECEMBER, 1858.

[No. 11.]

THE ANNUAL YIELD OF NITROGEN PER ACRE IN DIFFERENT CROPS, was the title of a paper read at the twenty-eighth meeting of the British Association for the Advancement of Science, by J. B. Lawes and Dr. J. H. Gilbert. In a paper presented at the last year's meeting, on the question of the assimilation of free nitrogen by plants, and some allied points, the authors had stated in general terms that the amount of nitrogen yielded per acre per annum in different crops, even when unmanured, was considerably beyond that annually coming down, in the forms of ammonia and nitric acid, in the yet measured and analyzed aqueous deposits from the atmosphere. The investigations then referred to were still in progress; and a desirable introduction to the record of the results would obviously be, to illustrate, by reference to direct experiment, that which had been before only assumed, regarding the yield of nitrogen in our different crops. To this end had been determined the annual produce of nitrogen per acre, in the case of various crops, which were respectively grown for many years consecutively on the same land; namely, wheat, fourteen years; barley, six years; meadow hay, three years; clover, three years out of four; beans, eleven years; and turnips, eight years. In the majority of the instances referred to, the yield of nitrogen had been estimated, both for the crop grown without manure of any kind, and for that with purely mineral manure,—that is, excluding any artificial supply of nitrogen. It was the object of the present communication to give a summary view of some of the facts thus brought to light. Beans and clover were shown to yield several times as much nitrogen per acre as wheat or barley. Yet the growth of the leguminous crops, carrying off so much nitrogen as they did, was still one of the best preparations for the growth of wheat; whilst fallow, (an important effect of which was the accumulation within the soil of the available nitrogen of two years into one,) and adding nitrogenous manures, had each much the same effect in increasing the produce of the cereal crops. Other experimental results were adduced, which illustrated the fact, that four years of wheat, alternated with fallow, had given as much nitrogen in the eight years as eight crops of wheat grown consecutively. Again, four crops of wheat, grown in alternation with beans, had given nearly the same amount of nitrogen per acre as the four crops grown in alternation with fallow; consequently, also much about the same as the eight crops of wheat grown consecutively. In the case of the alternation with beans, therefore, the whole of the nitrogen obtained in the beans themselves was over and above that which was obtained, during the same series of years, in wheat alone,—whether it was grown consecutively, or in alternation with fallow. Interesting questions arose, therefore, as to the varying sources, or powers of accumulation, of nitrogen, in the case of crops so characteristically differing from one another as those above referred to. It had been found that the leguminous crops, which yielded in their produce such a comparatively large amount of nitrogen over a given area of land, were not specially benefitted by the direct application of the more purely nitrogenous manures. The cereal crops, on the other hand, whose acreage yield of nitrogen under equal circumstances was comparatively so small, were very much increased by the use of direct nitrogenous manures. But it was found that, over a series of years, only about four-tenths of the nitrogen annually supplied in manure for wheat or barley (in the form of ammonia salts or nitrates,) were recovered in the immediate increase of crop. Was any considerable proportion of the unrecovered amount drained away and lost? Was the supplied nitrogenous compound transformed in the soil, and nitrogen in some form evaporated? Did a portion remain in some fixed and unavailable state of combination in the soil? Was ammonia, or free nitrogen, given off during the growth of the plant? Or, how far was there an unfavorable distribution, and state of combination, within the soil, of the nitrogenous matters applied directly for the cereal crops,—those, such as the leguminous crops, which assimilated so much more, gathering with greater facility, and from a different area of soil, and leaving a sufficient available nitrogenous residue within the range of collection of a succeeding cereal crop? These questions, among others, which their solution more or less involved, required further elucidation before some of the most prominent of agricultural facts could be satisfactorily explained. Comparing

the amount of nitrogen yielded in the different crops, when grown without nitrogenous manure, as above referred to, with the amount falling in the measured aqueous deposits, as ammonia and nitric acid, it appeared, taking the average result of the analyses of three years' rain, that all the crops yielded considerably more, and some very much more, than so came down to the soil. The same was the case when several of the crops had been grown in an ordinary rotation with one another, but without manure, through two or three successive courses. Was this observed excess in the yield over the yet measured sources at all materially due merely to exhaustion of previously accumulated nitrogenous compound within the soil? Was it probably attributable chiefly to the absorption of ammonia or nitric acid, from the air, by the plant itself, or by the soil? Was there any notable formation of ammonia or nitric acid from the free nitrogen of the atmosphere? Or did plants generally, or some in particular, assimilate this free nitrogen? As already intimated, some of the points which had been alluded to were at the present time under investigation; the authors having in this the able assistance of Dr. Pugh. Others, it might be hoped, would receive elucidation in the course of time. There, of course, still remained the wider questions of the original source, and of the distribution and circulation of combined nitrogen in the soil, in animal and vegetable life on the earth's surface, and in the atmosphere above it.

FRENCH "GRAIN RESERVE."—Napoleon I. desired the establishment in each of the large cities of France of a public granary, such as would prevent scarcity in years of short harvests by a reserve of the superabundance of the plentiful years. The *Constitutional* mentions that the government of Napoleon III. has under advisement a plan of the same description, such as shall avert future alimentary crises. In ordinary years grain enough is produced in France for her own wants or consumption, but the periods of dearth occasion extensive suffering and a drain of her specie, paid for the importation of great quantities. In the 40 years, from 1816 to 1855 inclusive, the cost of the cereals imported was 1,216 millions of francs, while the exports did not exceed 276 millions. In the interval of 55 years, from 1801 to 1855 inclusive, the absolutely bad years were one to six of the good. The practical effect of this scheme will be advantageous to the Agricultural interest of France, by ensuring a regular price for cereals.

JAPAN.—The recent visitors to this heretofore undescribed land say that anything like a plain, or a meadow, (in the American sense of the words,) is utterly unknown there, yet every practicable foot of land is highly cultivated. The narrow strip of interval between the banks of the numerous coves which border the shore and the mountain sides, is cultivated in gardens or planted with fruit-trees. From these rise terraces, the rocks being dug out of the earth and placed in walls by the mere strength of human bone and muscle, and then the earth leveled down, and the small patch or plot constructed, every inch of which is to pay its *semi-annual* tribute to the cultivator. Some of the paths, for *roads* there are none, are hewn out of the rock like stairs, or else stone blocks are hewn and carried where wanted and put in place. Here are terraces in garden vegetables; there in wheat and barley, and others in sweet potatoes, beans, egg-plants, and corn; while apple, pear, and peach trees are hanging with fruit, scattered about without order, and pines, and oaks, and cypresses, and small shrubs and bushes, whose names I do not know, help to make up the perfect carpet of verdure. Thus it is as far up as the cultivation of crops can be profitably carried, but the very summits of the mountain ridges are made productive. Thick forests cover the sides of some; trees are seen scattered along the backbones only of others, as if planted in one or two rows at little distances, with space enough to let light pierce through and show their beauty—the green set in gold! Sometimes an immense tree stands alone on the highest foot of a solitary mountain, fifteen hundred or two thousand feet high, spreading abroad its wide branches and standing in regal dignity, as if conscious of its beauty and inviting the world to admire it. Other mountain slopes and tops are covered with a luxuriant crop of tall coarse grass, which is used in thatching houses. Every where that the eye can reach, and wherever you go, in the valley, on the banks of rivulets and the bay, on the hill slopes, and the mountain sides, up to the highest peaks, there is not a brown patch, a barren acre, a naked foot. All is one great carpet of verdure in trees, and grass, in shrubbery, in gardens and cultivated grains; one great wilderness of vegetable luxuriance and beauty.

GIGANTIC HARVEST HOME.—The Irish papers contain an account of the gigantic harvest home on the estate of Mr. Pollock, in the county of Galway. About 1,400 persons (only one-half of his servants) were liberally entertained in the Home Farm Steading at Lismay. The roof covers nearly two acres of land, and the building was lighted with gas. The extent of this gentleman's operations may be judged by the fact that he has 1,800 acres in green crops, and 4,000 in grain, with about 4,000 head of cattle.

COTTON OIL.—Several cargoes of cotton-seed have been shipped recently from southern ports to France, where it is to be used for making "cotton oil."

THE STEAM PLOUGH recently invented by Mr. Fawkes, of Pennsylvania, was recently tested at Decatur, Illinois. Accounts of the trial say that the arrangements were not as complete as could have been desired, while falling rain and snow combined to make the ground wet, soft, and slippery. The machine was provided with an upright locomotive boiler, having 151 flues set upon a long frame-work, which rested on a large roller-shaped driving wheel behind, and two guide wheels in front. A tank and box for wood or coal rested over the driving wheel. The guide wheels are in advance of the boiler. The engine is of 20-horse power, with 8-inch cylinders driving the master wheel by cogs on the ends of the roller. The driving wheel is shaped like a barrel, being six feet long and five feet high. The mode of moving this enables the inventor to stop his machine at once without any danger of breaking anything. The guide wheels are about eighteen inches wide, and three feet high, turned by a wheel under the control of the engineer. The tank, smaller than intended, holds five barrels of water. Mr. Fawkes estimates the consumption of wood at one cord per day, and of water at one and a half barrels per hour. The weight is loaded about seven tons; cost \$2,500. Cost of a ten-horse power, \$1,500. The plows are on frame-work behind, capable of being lowered and raised by an assistant.

The machine drew six plows, cutting 12-inch furrows, between four and five inches deep. It plowed at the rate of one acre in forty minutes; on firm, hard ground it could go faster. On very wet ground the driving wheel slipped, which the inventor thinks he can obviate by putting spuds in it. The success was beyond expectation; and as there are several other steam plows in course of invention and erection, it is to be presumed that Yankee enterprise and ingenuity will soon put forth a steam plow that will surmount all obstacles to its success.

BOX MEASURES FOR FARMERS AND PLANTERS.—A box 24 by 16 inches square, and 29 inches deep, will contain a barrel—5 bushels, or 10,376 cubic inches. A box 24 by 16 inches square, and 14½ inches deep, will contain half a barrel—2½ bushels, or 5,376 cubic inches. A box 16 by 16½ inches square, and 8 inches deep, will contain also a bushel, or 2,158½ cubic inches; each inch in depth holding one gallon. A box 12 by 11½ inches square and 8 inches deep, will contain half a bushel, or 1,075½ cubic inches, each inch in depth holding half a gallon. A box 8 by 8½ inches square, will contain half a peck, or 198½ cubic inches. The gallon dry measure—a box 4 by 4 inches square and 4½ deep, will contain one quart, or 62½ cubic inches.

THE GRAIN TRADE OF CHICAGO.—The total receipts of grain at Chicago for the season, up to the 1st instant, were 470,284 bbls. flour, 9,484,599 bushels wheat, 8,549,518 bushels corn, 1,881,973 bushels oats, and 140,230 bushels barley; making a grand total of over twenty-two millions of bushels of grain, viz: 22,407,740 bushels. At this time last year the receipts had amounted to 309,000 bbls. flour, 9,178,728 bushels wheat, 6,500,000 bushels corn, and 1,100,000 bushels oats; making a total of 19,278,728 bushels of grain, and showing an increase, in the receipts of this year, of over three millions of bushels. The total shipments of the season were 391,667 bbls. flour, 8,666,931 bushels wheat, 7,523,693 bushels corn, 1,526,408 bushels oats, and 115,549 bushels barley; making a grand total of nearly twenty millions of bushels of grain, viz: 19,790,916 bushels. At this time last year, the shipments had amounted to 175,000 bbls. flour, 8,800,000 bushels wheat, 6,600,000 bushels corn, and 180,000 bushels oats; making 16,455,000 bushels of grain, and showing an increase, in the shipments of this year, of over three millions of bushels.

INDIAN CORN FOR EXPORTATION.—The *Louisville Courier* speaks of an invention for preserving meal by the insertion of a tube through the centre of each barrel, thus admitting a free circulation of air. The editor says that the bread made of meal submitted to this process, after it had been subjected to four passages across the Atlantic ocean, it was perfectly sweet, and made superior bread. This subject is a very important one, and will be discussed at the coming Agricultural Congress. While wheat is liable to so many casualties, and while there is a gradual falling off in the product in all the wheat growing States, and while Indian corn is one of the most productive and sure crops in the United States, it certainly behooves us to employ such means as will preserve this cereal in the most perfect manner, and secure the immense foreign trade that awaits us in this article.

SCIENTIFIC AGRICULTURE.—Mr. Henry C. Vail, who has had much experience as an agricultural instructor and lecturer, is now located at Springfield, N. Y., where he receives pupils for a course of agricultural instruction, in which they are indoctrinated in the connexion of the sciences with the successful cultivation of the soil. Mr. Vail claims for his system of instruction that it is simple, thorough and efficient, and that it has the approval of the best cultivators and scientific men.

BACK NUMBERS of the *Monthly Bulletin* sent to all members who may wish to complete their sets.

CONVOCAION OF AGRICULTURISTS.—As one of the means of devising a more expeditious and effective mode of collecting agricultural statistics for the annual report of the Patent Office upon agriculture, the Commissioner of Patents, (with the approval of the Hon. Secretary of the Interior,) has invited a number of gentlemen from different sections of the Union, skilled in various branches of rural industry, to convene at an appropriate room in the Patent Office building on Monday, the 3d of January next, at 10 o'clock, A. M., with the view of imparting a knowledge of such facts in practical husbandry as may have come under their experience and observation, and to suggest means by which our crops may be increased, improved in quality, or made more profitable to the producer.

It is understood that the deliberations of this convocation are not to be reported, or otherwise made public, until they have been revised and published in the Patent Office report.

OPERATIONS OF THE AGRICULTURAL DIVISION OF THE PATENT OFFICE.—In addition to the matters mentioned in the Report of the Secretary of the Interior, (on the opposite page,) measures have been taken to procure the *modus operandi* of agricultural schools, and of experimental grounds, in various countries of Europe; also, to obtain in detail the processes of preparing figs, raisins, and Zante currants, and of the manufacture of oil and wine.

The "American Arboretum" at Washington has been commenced, under the direction of the Agricultural Division of the Patent Office, and seeds of many varieties of plants, shrubs, and trees have been obtained. Messrs. Parsons & Co., of Flushing, Long Island, have liberally presented more than one hundred species of American trees, shrubs and vines, which have been accepted. Donations have been promised from other sources. Mr. Parsons, (who is about to visit Europe,) has kindly offered to procure at Paris a set of porcelain labels, inscribed with the common and the botanical names of each species.

AGRICULTURAL COLLEGES LAND BILL.—On Monday, December 6, Senator Stuart of Michigan said: "At the last session there was passed, by the House of Representatives, an act donating public lands to the States and Territories, to provide colleges for the promotion of agriculture and the mechanic arts. That bill was referred to the Committee on Public Lands, and reported back favorably, and it stands now as a part of the business of the Senate. I shall not ask the Senate to make it a special order, nor do I design to state any particular day when I shall ask the Senate to take it up and pass it; but I simply desire to give notice that, as soon as the Senate shall be full, I shall ask the Senate to proceed to the consideration of that bill, and in the hope that we may be able to get a decisive vote upon it at a very early day."

This is the act introduced into the House by Mr. Morrill, of Vermont, and passed there by a majority of five votes. It grants to the several States, (says President Williams,) "for the benefit of Agriculture and the Mechanic Arts," 20,000 acres of land for each Senator and Representative to which each State is entitled. Ten per cent. of the grant can be used for the purchase of farms, but none of it can be converted to the erection of buildings. By reference to the latest report of the General Land Office, it appears that we recently possessed 1,088,792,498 acres of unsold public domain. The grant proposed by the bill in question does not amount to two-thirds of one per cent. Can any one doubt that our great landed inheritance would be enhanced in value ten times that per centage, by the creation of a cordon of Colleges throughout the States, where those studies are taught which conspire to render men more enlightened tillers of the soil. From a report in 1854, it appears that an aggregate of 4,050,704 acres of land had been granted to fifteen States of the Union, for the endowment of Universities. More than 60,000,000 of acres have been appropriated to the establishment of Common Schools. It seems to have become the unquestioned policy of the Government to set apart a portion of the public lands, as a sacred fund, for the education of men, who and whose posterity are to inhabit them. Surely, if it is a legitimate use of the lands to devote them to the use of professional and classical learning, for still more powerful reasons, justice and expediency demand a share of them for instruction of men in those Sciences and Arts which bear directly upon Industrial and especially Agricultural pursuits. We support two National Schools for instruction of men in the arts of destruction. Let something be done for the support of schools for instruction in the arts of production."

MEDALS of 1858.—A large proportion of the medals awarded at Richmond have already been struck at the United States Mint, and are in the hands of the engraver. They will all be ready for delivery at the annual meeting of the Society, January 12, 1859.

HOUSE COMMITTEE ON AGRICULTURE.—Messrs. William G. Whiteley of Delaware, Lawrence W. Hall of Ohio, Wm. H. Kelsey of New York, John Huyler of New Jersey, Richard Mott of Ohio, James B. Foley of Indiana, James L. Gillis of Pennsylvania, R. P. Tripp of Georgia, W. H. Keim of Pennsylvania.

THE ANNUAL REPORT of the Secretary of the Interior concludes with the following recapitulation of the benefits conferred upon the agriculture of our country by the Agricultural Division of the Patent Office :

"The subject of agriculture appears to occupy an increased share of public attention, and every new fact in relation to the productions of the earth is received with favor by the country. The agricultural division of the Patent Office may justly claim that it has contributed, more than any other agency, in exciting the interest thus manifested. By means of the appropriations made from year to year, 'for the collection of agricultural statistics, investigations for promoting agricultural and rural economy, and the procurement and distribution of cuttings and seeds,' great material advancement has already been effected; and, though much remains to be done, the advantage to the country from these expenditures cannot be too highly estimated. A few years ago science had done comparatively little for the farmer; the modes of cultivation were careless and without system; the component elements of the soil and of many valuable fertilizers were not understood, and costly manures were generally applied without knowledge, and often without benefit; and improvements, by means of the introduction of superior seeds and cuttings, were dependent upon the feeble and variable exertion of individual enterprise. It was then that the Patent Office, in obedience to the expressed wishes of the national legislature, entered upon the execution of its utilitarian plans, including investigations into the character of soils, the peculiarities of different climates, and the collection of accurate information in regard to the suitableness of the several divisions of the country for the propagation of desirable plants and animals. A great mass of facts has been collected, collated, published, and scattered broadcast among the people, together with improved seeds and new plants, and directions as to the best modes of cultivation. The public attention has thus been awakened and arrested; agricultural societies have sprung into existence in every State, and almost every county, over the whole country; men of science have been induced to lecture upon agriculture and its kindred subjects, and thus shed a flood of light upon all the processes of nature in the vegetable productions of the earth and the economy of animal life; public fairs have been encouraged, and competition in every branch of agricultural industry fostered by awards of premiums to the most successful; newspapers and magazines devoted to agriculture in all its branches have been established, and seeds have become an article of merchandise in almost every village; and professorships in our colleges have been instituted with the view of impressing upon the young student the advantages of scientific knowledge in its application to production.

"Among the primary advantages of this official agency may be enumerated uniformity of method, concurrence of action, and the communication of results to a common centre for comparison and elaboration and subsequent judicious publication. Although it may be admitted that experiments have been made, and seeds distributed, which have proved of little profit, yet, in a country possessed of so great a variety of soil and climate, it was wise to essay the propagation of every plant affording any hope of usefulness, especially as each success would more than compensate for all the cost and trouble attending many instances of failure. A few examples of this character may with propriety be here cited. The apparently waning sugar culture of the United States has been reinvigorated by the introduction of rattoons of new varieties from Demerara and Caracas. The success attending the culture of the Chinese sugar cane in the southern, middle, and western States has been greatly augmented, fully equaling all that was anticipated from it. It is believed that not less than a hundred thousand acres have this year been devoted to its culture, for syrup-making and forage for stock, for both which purposes it is generally, if not universally, pronounced admirably adapted. Of the cereals, the different varieties of wheat and barley, introduced from regions adjacent to the Mediterranean, and from France, are highly appreciated by intelligent farmers. The chufa, which was obtained from Spain and extensively distributed, has been successfully cultivated, it is believed, in every State in the Union. From the recent analysis of this tuber, as well as from the testimony of many cultivators, the belief is warranted that it will prove of great value. The cork oak, also introduced from Spain, has found so much favor that a large supply of acorns has been ordered.

"In conformity with plans for promoting the culture of the grape and the manufacture of wine, an effort is in progress to collect the indigenous vines, and, after a series of experiments, to induce the cultivation of the more approved varieties in their appropriate localities.

"It is believed that the effort now making to obtain information in regard to the several varieties of the tea plant, the soils and climates best adapted to their growth, and the methods pursued in their culture and subsequent preparation for commerce and consumption, is the most earnest, and likely to prove the most decisive, that has ever been made in this country or in Europe; and it is hoped that, before the expiration of another year, a degree of progress will have been attained in this enterprise upon which to base an intelligent opinion respecting its ultimate success. In view of the facts that the importation of the grape and its products, raisins, wine and brandy, as shown in the average of four years, ending with 1857, involves an annual expenditure of \$6,718,235, and of tea of \$6,602,984,

and that the domestic production, by insuring unadulterated and cheaper commodities in commerce, will increase the consumption, it will not be thought that too much attention is given to these subjects.

"The entomologist in this branch of the service has been stationed in the region of the St. John's river, Florida, where he is occupied in investigations relative to the insects infesting the orange tree and cotton plant, in the hope of devising means to destroy them or prevent the injuries they inflict, and in noting all the accidents and diseases to which this tree and plant are liable, and endeavoring to ascertain the causes thereof and the most efficient preventives and remedies.

"The result of the researches of the chemists during the past year, are recorded in the Report on Agriculture for 1857. These persons have been employed during the present year in analyzing the ash of the tobacco plants and their soils, as found in Massachusetts, Maryland, Kentucky, Florida, and the island of Cuba. A chemical examination has also been ordered to ascertain the composition of the soils of east Florida, peculiarly adapted to the growth of sea island cotton.

"In presenting these as a portion of the objects to which the liberal grants made by Congress for the advancement of agriculture have been appropriated, I would remark that, in view of the fact that ours is emphatically a country of cheap lands, where every citizen so inclined may easily become a landed proprietor, and that so large a proportion of the people are devoting themselves to the cultivation of the soil, it cannot be considered that the government has acted prodigally or unwisely in attempting in its legislation to elevate agriculture, so essential to our wealth and prosperity as a nation, at least to an equality with other pursuits."

AGRICULTURAL BUREAU OF MISSISSIPPI.—This bureau, established by the Legislature, has been regularly organized, and the State society is now disbanded. Delegates from twenty-nine counties and from three districts were present at the first meeting, T. J. Hudson, esq., presiding. Among other business, it was decided to petition the Legislature to amend the organic law, by adding to it a clause compensating the delegates at the rate of two cents per mile and four dollars per diem, the sessions not to exceed six days. Amendments were also recommended, allowing two or three adjacent counties, thinly settled, to unite under one charter, and to form one society entitled to State bounty; also to make the capital stock necessary to secure the State bounty consist of ground purchased for fairs, as well as money or secured notes. The salary of the secretary, J. Williams, Esq., was raised to one thousand dollars, and the following resolutions were passed, recommending the support of a valuable periodical—*The Mississippi Planter and Mechanic*:

"Resolved, That we recommend to each county society subordinate to this Bureau, and to each member of those societies, as well as to all persons in this and the adjoining States, friendly to the cause of agriculture, to subscribe for the same, as a paper eminently calculated to advance the cause in which they feel so deep an interest, and that we recommend it to all those wishing to make advertisements in any manner connected with agriculture and mechanics, as a fitting medium of addressing the public.

"Resolved, That the friends of agriculture in this State are requested to come forward in a spirit of liberality for the purpose of raising a fund for the purchase of a press for the use of this Bureau, and that the use of the sum be tendered to the editors of the Mississippi Planter and Mechanic, until otherwise ordered by this Bureau."

NEW YORK COLLEGE FARM.—We notice with pleasure that donations of stock, implements, and seeds are being made to this useful institution.

THE S. C. FARMER AND PLANTER has been purchased by Mr. Stokes, late of the Laurenceville Herald, who proposes to remove it to Columbia. It will be edited, (we learn,) by one of the ablest planters in South Carolina, and the first number of the new series will be issued about the 20th of January.

Dr. N. B. CLOUD.—A recent number of *Harper's Weekly* contains a portrait of Dr. Cloud, the efficient Secretary of the Alabama State Agricultural Society. "He is a native of Edgefield district, South Carolina, and removed to Alabama in the spring of 1838 to engage in the practice of his profession. With his professional business he soon associated the pursuit of agriculture, to which he had been bred up from early life. He was very successful as a farmer. In 1852 he established the '*American Cotton Planter*' in the city of Montgomery. Beginning under manifold discouragements, with a subscription list of 500 or less, it now stands foremost in the ranks of agricultural journalism in the south, with a growing popularity, and a current list of about 6,200 subscribers. Its success is worthy of its active and intelligent editor."

THE COTTON CROP OF GEORGIA is estimated by Hon. Mark A. Cooper as worth \$25,000,000, and the capital invested is estimated at \$110,000,000.

THE LARGEST YIELD OF INDIAN CORN.—In looking over the list of Premiums and the Reports received at the office of the United States Agricultural Society, from obliging secretaries of State and County societies, it appears that the honor of having produced the largest yield of Indian corn in North America belongs to Dr. J. W. Parker, of Columbia, South Carolina. It amounted to two hundred bushels and twelve quarts per acre, as reported by a committee of the South Carolina State Agricultural Society, and had been thus cultivated: "The ground was sand-hill branch land, prepared by under-draining and broken up in November, and twenty-five two-horse loads of cow or horse manure were applied to the acre in December, and well plowed in with a two horse plow, which was followed by the subsoil plow drawn by two mules. About the first of March another coat of stable manure was spread and again plowed. Early in April, three cart loads of air-slacked lime, and two sacks of salts were spread over each acre, and lightly plowed under. On the 14th of May the ground was thoroughly plowed again with a large plow, harrowed level and laid off thirty inches apart with a shovel plow. Guano and plaster was then sprinkled in the furrows—nearly two hundred of the former and three hundred pounds of the latter to each acre. The seed planted was first soaked for one night in a strong solution of nitre, and drilled at distances of eight to twelve inches in the rows, and covered with hoes; the ground was then rolled and left perfectly level. The first dressing was with a long narrow plow, followed with hoes. On the 5th and 17th of June the same work was repeated, each time leaving the ground level. During the season there was a protracted drought. Piece No. 1 was irrigated twice, and piece No. 2 had water turned on it once."

HOW CORN IS PRESERVED IN RUSSIA.—At a late meeting of the Academy of Sciences, held in Paris, a letter from M. de Semchhoff—a Russian land-holder—was read, describing the manner in which corn pits are made in that country. The pits are dug in a dry soil, and instead of masonry, the sides are hardened by a long continued exposure to a wood fire. Before the corn is introduced, the air in the pit is rarified by burning some straw in it, after which the grain is thrown in, packed close, and the pit tightly inclosed. Corn has been preserved in such pits for forty years. Some of our Western farmers, who raise large crops of wheat and corn, should try this method of preserving grain during years when there is a great yield, in order to lay up a store for seasons of an inferior yield.

SHEEP IN TEXAS.—The *San Antonio (Texas) Herald* states that Mr. Robinson, of Boston, who intends to go into the business of sheep raising upon a pretty large scale, has made his location in Mr. Kendall's neighborhood, on the Guadalupe, and received recently his first drove of sheep from Mexico, some 1,500 head. There were several others who went to Mexico at the same time for sheep, among them Mr. Judson, and the number brought on was about 4,000 in all. These gentlemen are now importing fine bucks from the north.

DRY ROT IN COTTON.—The *Lauderdale Republican* publishes a prize essay on the dry rot in cotton, delivered by Dr. Peyton King at the recent fair of the Agricultural and Mechanical Society of Lauderdale county. The conclusions at which Dr. King arrives are, "that the dry rot primarily and mainly proceeds from diseased or faulty seed; that dry weather very much promotes it, and seasonable weather checks or retards it; thirsty or manured land is favorable to it, and it will regularly increase more or less so long as the present diseased seed are planted; that the great body of seed now planted are diseased; and that to eradicate the rot seed must be obtained free from it."

THE CROPS OF RED RIVER.—An able report has been published by the Canadian Government, from a Scientific corps sent last summer to explore the country between Lake Superior and the Red river, above the 49th parallel. On one farm, wheat, which is the staple crop, was sown May fifth and harvested August eighteenth, having required one hundred and five days to ripen. Barley was sown May twenty-eighth, and reaped August eighteenth. Indian corn is planted about the twenty-third of May, and ripens every year. Potatoes are planted from the twenty-second to the twenty-sixth of May; the potato crop here is truly magnificent. Cauliflowers, Windsor beans, celery, beets, several varieties of cabbage, in fact every desirable vegetable was seen in profusion, and of excellent growth.

It is hard to credit some of the statements of productiveness in a country five hundred miles to the north of St. Paul's, Minnesota, if we regulate our ideas of climate by parallels of latitude. In reality, however, the Red river valley is very little different from that of Fort Snelling, and the line of the average mean temperature of St. Paul, instead of following the 45th parallel, deflects northwest from this point along the Mississippi, and following the declination of the surface elevation along the Red river and adjacent valleys, carries all the characteristics of the temperate climates up to the base of the Rocky Mountains, in whose gorges it meets the balmy breezes of the Pacific slope.

VIRGINIA CENTRAL AGRICULTURAL SOCIETY.—At the annual meeting of the Virginia Central Agricultural Society, held in Richmond on the 27th of November, 1858, the following officers were elected:

President.—James Lyons of Henrico county.

Vice Presidents.—Wm. C. Rives, Wm. B. Preston, Wm. H. Macfarland, P. St. Geo. Cocke, Joseph Mayo, Henry Cox, George W. Munford, Collin Clarke, John Rutherford, Dr. Joseph M. Sheppard, Abram Warwick, Allen T. Caperton, Wm. P. Taylor, Wm. Wirt, Wm. B. Harrison, James Galt, R. A. Claybrook, H. C. Neal, O. G. Clay, George T. Yerby.

Executive Committee.—J. L. Davis, Wm. B. Stanard, Wm. M. Harrison, Gen. Wm. H. Richardson, Peyton Johnston, John A. Seldon, Wm. C. Wickham, H. C. Cabell, Albert Aiken, Fendal Griffin, R. B. Haxall, R. Archer, J. W. Ware, N. B. Hill, Col. S. McRae.

Secretary and Treasurer.—Col. Charles Dimmock of Richmond.

Col. Dimmock has transmitted to the Secretary of the United States Agricultural Society the following complimentary resolution, accompanied by a letter, in which he expresses his "individual gratification in being the agent to communicate this feeble testimony of the respect and kindness in which your Society is held by our subordinate Society."

"*Resolved*, That this Society take pleasure in acknowledging the courtesy and kindness of the officers and members of the U. S. Agricultural Society, during the late Fair, as well as for the aid given us in getting up our first exhibition."

MEDALS OF 1857.—Six months have now elapsed since those to whom medals were awarded at the Louisville exhibition, were notified that they were ready for delivery to them or to their agents. Some were forwarded by members of Congress, others by express, and a few remain unclaimed. Will agricultural editors call attention to this, and aid us in earnestly requesting those to whom these medals belong to send for them without further delay?

SEVENTH ANNUAL MEETING.—The United States Agricultural Society will hold its Seventh Annual Meeting in the Lecture Room of the Smithsonian Institution, at Washington city, on Wednesday, the twelfth day of January, 1859, when the election of officers will be held, and the business required by the constitution of the Society will be transacted.

Officers and Members of the Society are respectfully notified to attend, and a cordial invitation is extended to State and other Agricultural Associations to send Delegates, that there may be a general representation of Agriculturists "in Congress assembled," to protect and sustain their interests, acting as a national organization on such matters pertaining to Agriculture as may be deemed appropriate. Gentlemen from other lands who may be interested in the acquisition and diffusion of Agricultural knowledge, are also invited to attend, and to participate in the proceedings.

The Medals and Diplomas awarded at the Sixth Annual Exhibition at Richmond, will be delivered to successful competitors, or their agents. The published volume of Transactions for 1858, will be delivered to Members of the Society, and to gentlemen connected with the Agricultural Press.

Important Agricultural topics will be publicly discussed, after introductory remarks by eminent scientific and practical agriculturists. Gentlemen having other topics pertinent to the advancement of Agriculture, which they may wish to introduce or to have discussed, will please refer them to the Executive Committee, through the Secretary, that a place may be assigned them on the daily programme.

Delegates are requested to bring copies of the publications of the Societies which they represent—one for the Library of the U. S. Society, and others for foreign and home interchange.

Propositions from cities at which the next Annual Exhibition of the Society is desired, will be received and considered.

The Business Office of the Society is in Todd's Marble Building, one door west of Brown's Hotel, Pennsylvania avenue, where all interested in the cause of Agricultural improvement are invited to call when in Washington city. A large number of Agricultural newspapers, periodicals and reports, (liberally contributed,) are placed on file for public inspection, and the Library is also free to all who may desire to examine it. Models or Drawings of Agricultural Implements, and other objects of interest, are placed on exhibition without charge.

Gentlemen who may wish to become Life Members of the Society, can do so by paying or remitting ten dollars to the Treasurer, Hon. B. B. French, Washington city. This will entitle them, without any further payments, to the full privileges of membership—among these are: free admission to all exhibitions of the Society, the annual volumes of published Transactions, the Monthly Bulletin, and the large and elegant Diploma. The fee for Annual Membership is two dollars, which ensures the receipt of the Transactions and the Monthly Bulletin for one year.

Editors are requested to call attention to the above announcement. Those who notice it will please send marked copies of their papers to the *Monthly Bulletin*, and they will receive in return the volume of *Transactions* for 1858.